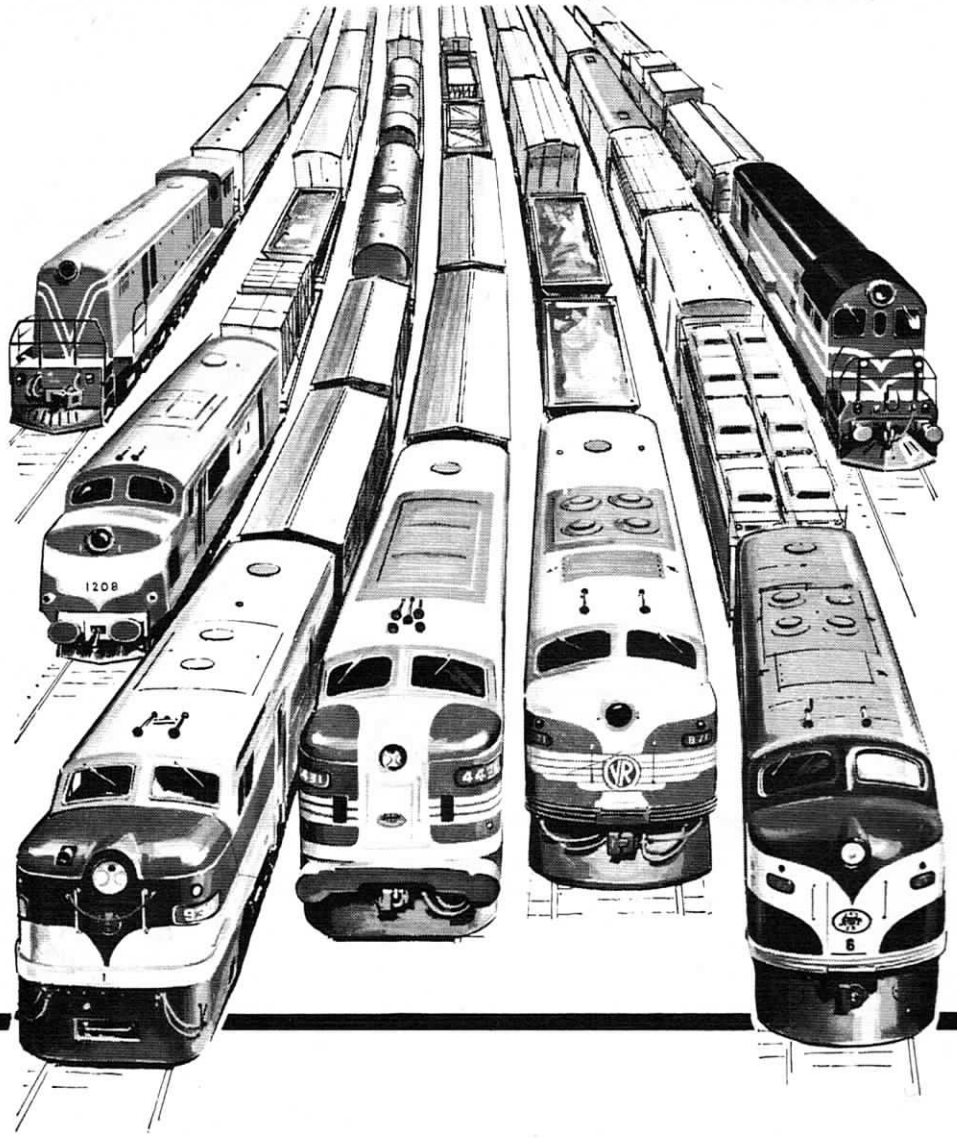
TASRAILS

70s



THESE TRAINS MEAN BUSINESS

From the Gulf to Derwent River . . . from the shores of Sydney Harbour to the Avon Valley in the West . . . the freight trains of Australian Railways are constantly at work on a never ending collection and distribution of the nation's wealth. Much of it concerns the great primaries from which we draw our daily sustenance, as well as export wealth — the bounty of our pastures, the fruit of our orchards, our great mineral resources.

These trains mean business . . In the field of land-based transportation, nothing matches rail over medium or long distance hauls. No other land transport agency on a ton-mile basis carries freight at such low cost — or so speedily.

Support for the Railways of Australia is something more than just good business.

In a country of great distances, where transport costs are higher than in most other countries, the government-controlled rate structure of Australian Railways is a sound and basic common denominator, one which works—as it has done for over a century—for the betterment and benefit of all Australians.

RoA

RAILWAYS of AUSTRALIA

Inserted by authority of the Commissioners of the Commonwealth and State Railway Systems of Australia

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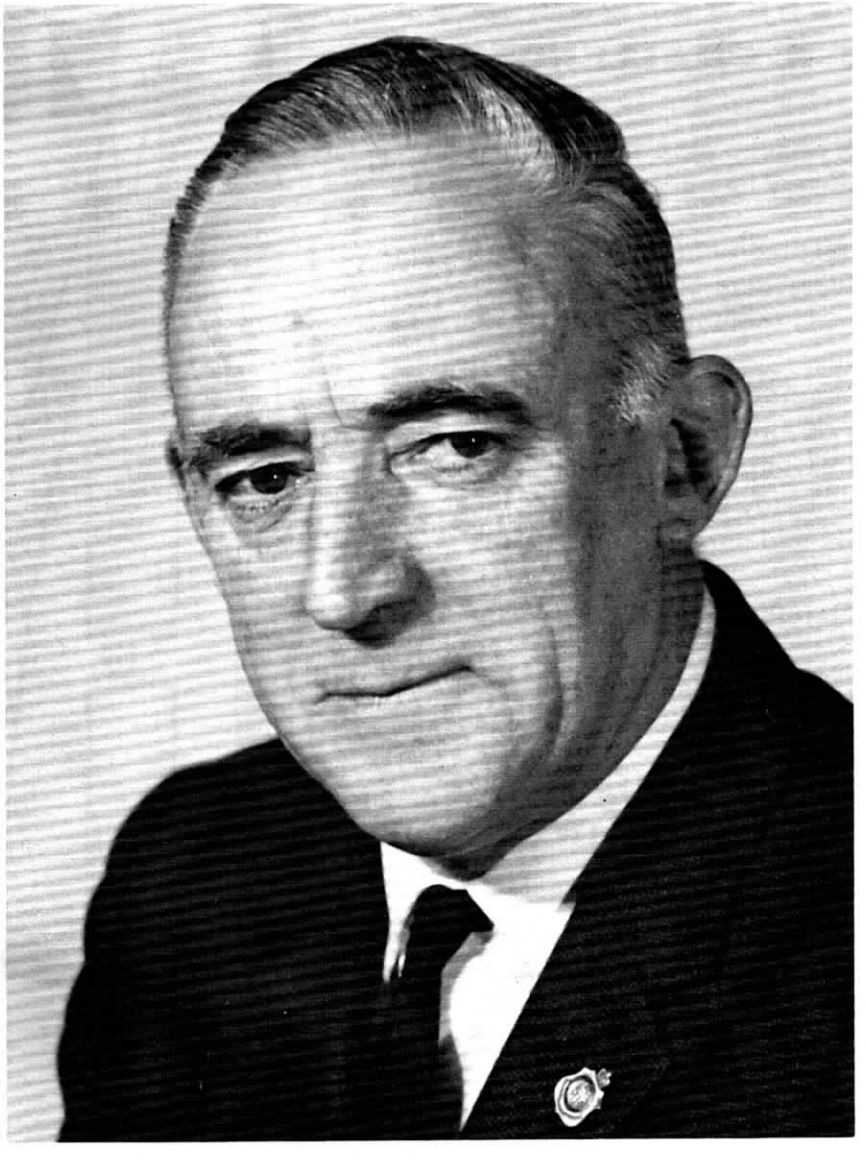


INTRODUCTION

I am pleased to be associated with this publication, the purpose of which is to tell the part played by the Tasmanian Government Railways in the commercial welfare of this State.
Although small by comparison with other systems, the Tasmanian Railways have continued to maintain modern standards and design in rolling stock and equipment. At the same time, in the performance of its transport task, the railways have achieved a high degree of technical advancement in the variety and type of facilities available for goods handling.

Industrial expansion in several parts of the State has resulted from the progressive policy of railway management in Tasmania and the ability of the railways to provide efficient services for the movement of raw materials and finished products. For many years now the Rail Ferry Service has been one of the main avenues through which Tasmanian goods and produce has reached the interstate markets.

I have no doubt that in the future, the railways, accepted as an integral part of the transport system, will continue to make a valuable and significant contribution to the economic development of this State.

L. H. Bessell, M. H. A.,
Minister for Transport.

THE RAILWAYS MEET A CHALLENGE!

The ability of the Tasmanian Government Railways to keep pace with the growing demands of industry and economic activity with increased efficiency has been demonstrated by:

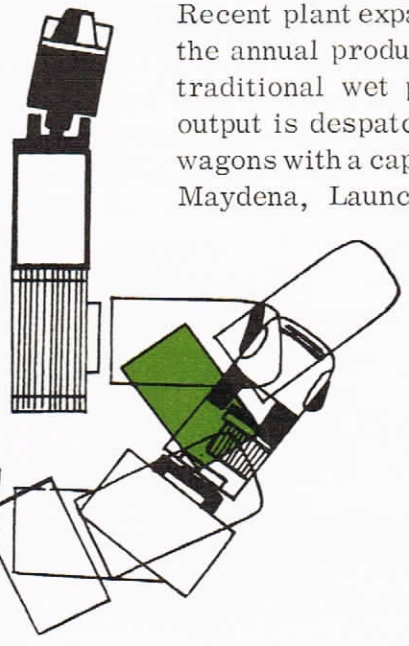
- The growth of specialised services designed to assist the expansion of a variety of industrial undertakings and the development of bulk transport facilities and plant required for the movement of large loads including containers, heavy equipment and components for construction works.
- The construction of the pallet-type container readily adaptable to rail, road and sea transport which, for the Railways of Australia, marked their introduction of container services now operating on a national and international basis.
- Diesel express services which provide ready and convenient means for effecting overnight and quick delivery of parcels and sundry goods to the main centres of population throughout the State.
- A unique insurance scheme covering claims for any loss or damage to goods and parcels in transit.
- The high standard of comfort offered by the "Tasman Limited" for intrastate travel and assistance in the field of tourist promotion by combining excursion trips with weekday services of the "Tasman Limited".
- The measure of higher operating efficiency as shown by the fact that in ten years (1959/60 - 1968/69) nett ton miles have increased from 114 million to 117 million whilst....

- There have been reductions of 34% and 11% respectively in locomotive stock and wagon stock, and a drop of 12% in staff employed.
- Train miles have been reduced by 23% and route miles open by 7%.
- The average payload has increased by 35%; earnings have risen by 39% and volume of traffic by 37%.

at work with industry

THERE IS AMPLE EVIDENCE TODAY THAT THE TASMANIAN GOVERNMENT RAILWAYS ARE CAPABLE OF PROVIDING THE WIDE RANGE OF TRANSPORT SERVICES NECESSARY TO KEEP PACE WITH DEVELOPMENT IN PRIMARY AND SECONDARY INDUSTRIES.

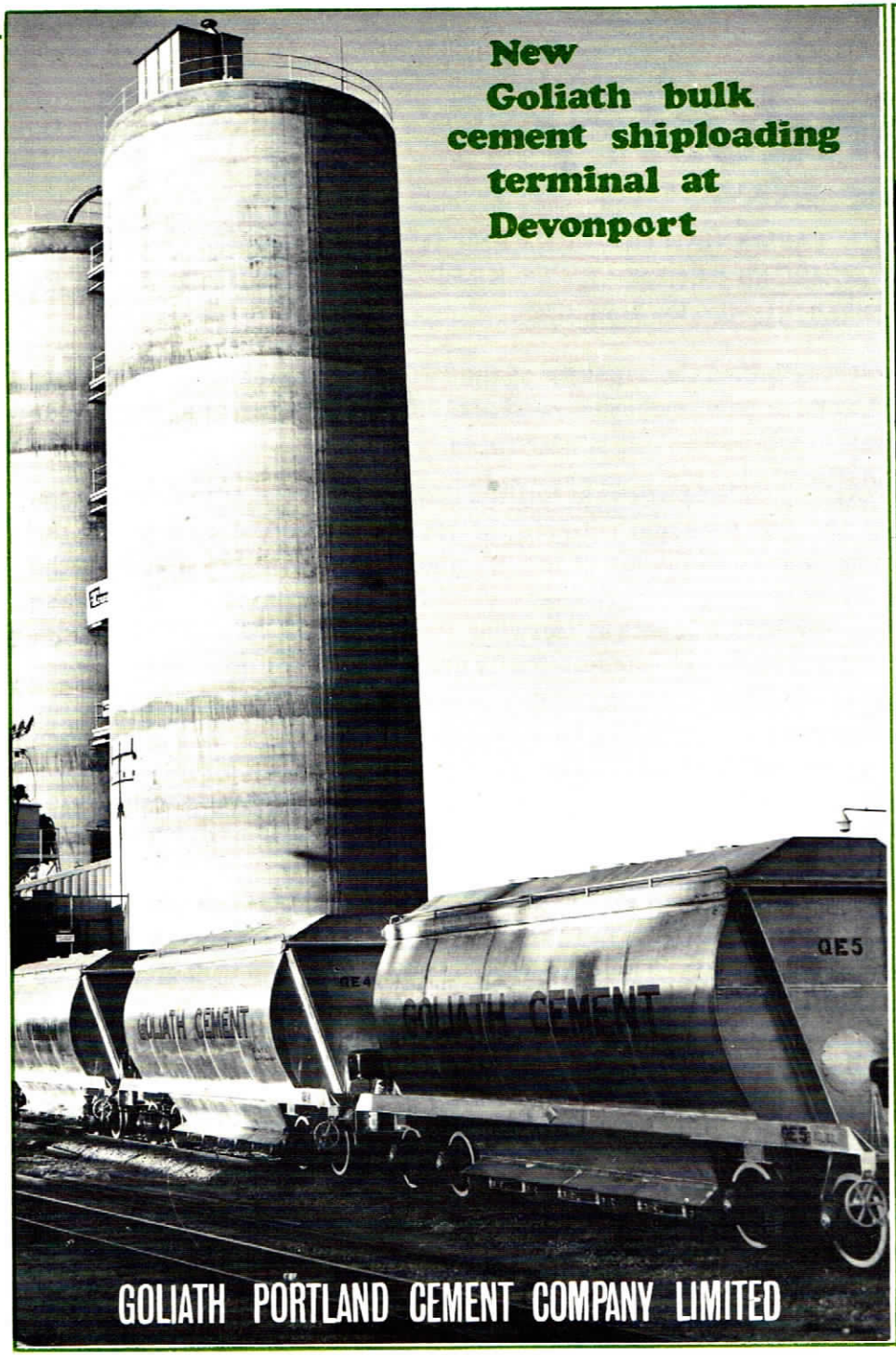
The development of bulk transport facilities has strengthened the capacity of the railways to meet the increasing demands of heavy haulage traffic and specialised wagons have been designed and constructed for this purpose at the Launceston workshops.



Recent plant expansion at the Goliath Portland cement works at Railton (North-West Coast) has increased the annual production capacity to over 500, 000 tons and reflects the overseas trend of abandoning the traditional wet process of cement manufacture in favour of the Humboldt dry process. Most of the output is despatched by rail and two types of special wagons are used for bulk cement. "BC" class wagons with a capacity of 30 tons serve distribution depots at Derwent Park, Hobart, Macquarie Plains, Maydena, Launceston and Longford. These units are pneumatically pressurised for efficiency in discharging. "QE" class aluminium wagons with a capacity of 45 tons are used for the cement railed to Devonport for shipment to Victoria and New South Wales. These are bottom-dump wagons equipped with an hydraulic system capable of developing a pressure of 3, 000 lbs. per square inch to operate the discharge gates for very fast unloading. The operations of unloading the wagons and the associated bulk ship loading, are remotely controlled and dust-free.

Plant extensions at Railton include the installation of a new cement mill which, driven by a 3, 300 h.p. motor, will be the largest cement mill in Australia. This mill will be a closed circuit mill. The classifier which is of German design will be a very sophisticated unit providing precision control over the final product. Although used to a considerable extent in Europe and Japan the Wedag classifier will be the first in Australia. A very large amount of electronic control equipment has been incorporated in the design ensuring a top-grade product at all times. To enable the Goliath Portland Cement Co. to develop limestone deposits over a period, the railways will be relocating a section of the main running track on the North-West Coast.

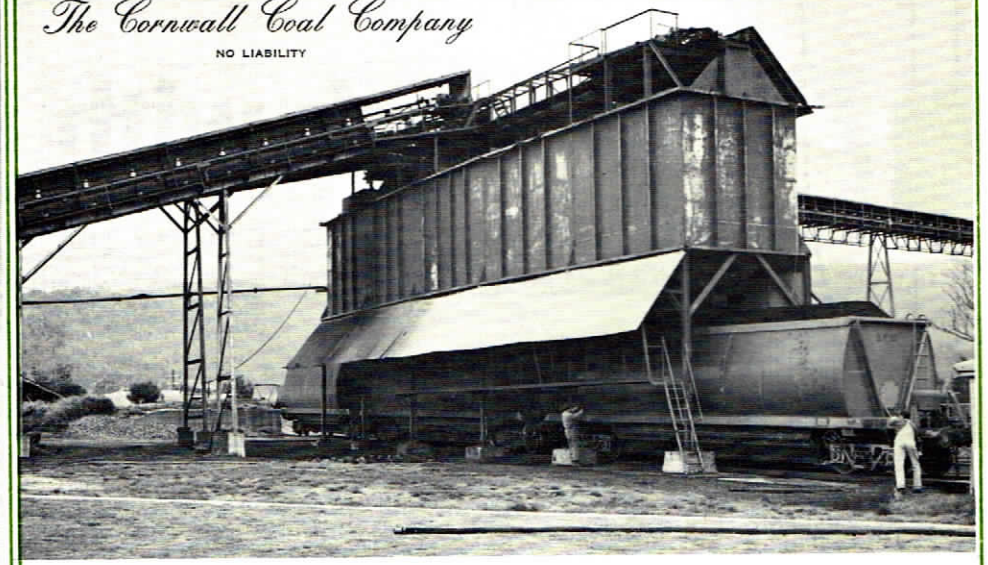
A more recent development in bulk handling facilities has been the construction in the Launceston railway workshops of 18 bottom dump type aluminium wagons to transport the 75, 000 tons of coal used each year by Australian Newsprint Mills at Boyer, Southern Tasmania. The bulk of this coal is supplied by the Cornwall Coal Company and is transported a distance of 127 miles from the Fingal branch line.



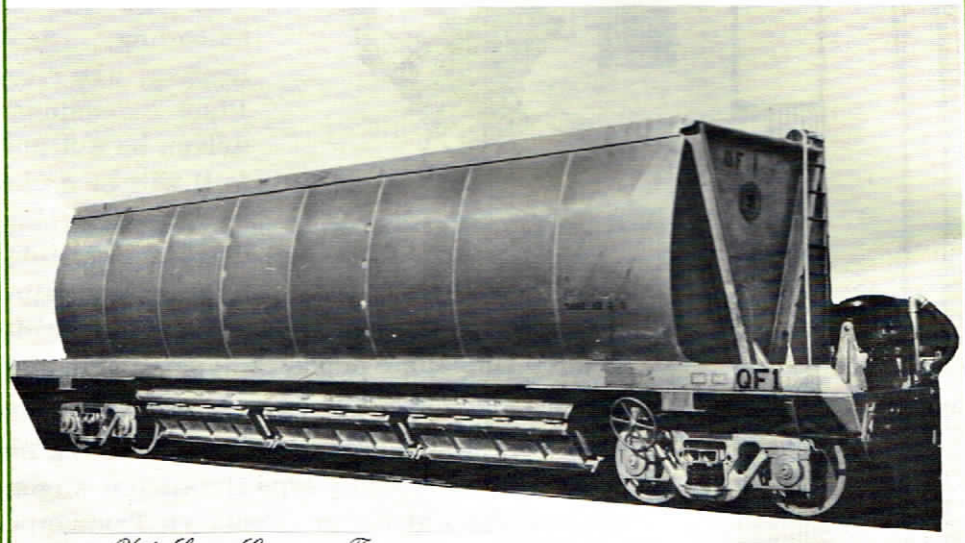
New Goliath bulk cement shiploading terminal at Devonport

GOLIATH PORTLAND CEMENT COMPANY LIMITED

The Cornwall Coal Company
NO LIABILITY



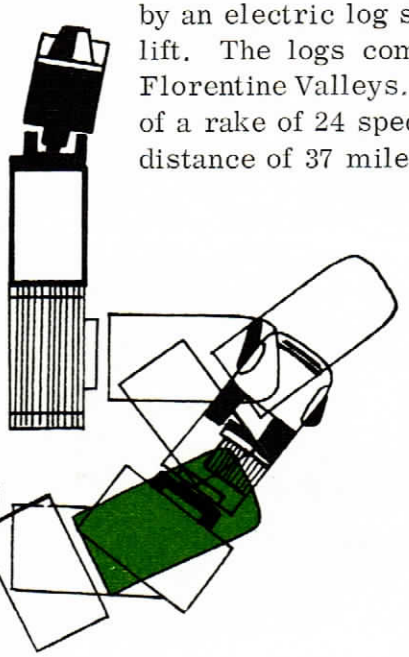
We welcome enquiries for coal, from any group considering industrial development within Tasmania.
The combination of our modern continuous miner unit underground, and washing and screening plant, with the Tasmanian Government Railways' 'QF' wagons (illustrated) for efficient handling to market, enables us to offer our product at prices competitive with other fuels.



93 York Street Launceston, Tasmania. 7250

The coal is mined by continuous mechanical miner and after washing is delivered to a live stockpile from which the coal is conveyed to overhead bins to facilitate loading at a rate of up to 330 tons per hour. By this means it is possible to achieve a rapid turnround of the aluminium rail wagons. The Company has been endeavouring to increase its market within the State. At present consumption of coal is limited to steam raising and for use in the ceramics industry. The coal is of a sub-bituminous non-coking type with a low sulphur content and a calorific value of about 10,200 b.t.u's per lb. At Boyer the coal is discharged at the rate of one wagon load of 46 tons in less than 30 seconds. Belt conveyors, some 1,300 ft. in length, are used to stockpile the coal and to convey it to the steam generating plant which dries the paper on the three newsprint machines.

Australian Newsprint Mills is the only company manufacturing newsprint in Australia and its present output of 165,000 tons per year provides approximately 45% of Australia's newsprint requirements. It was the first mill in the world to manufacture newsprint from hardwoods.

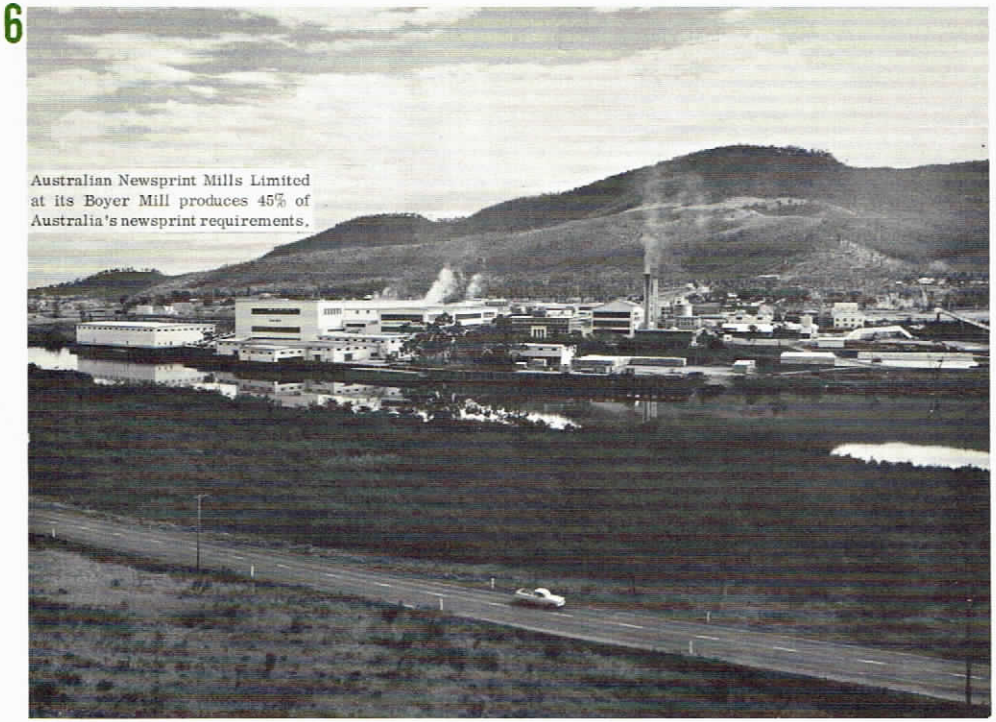


At the Maydena depot of Australian Newsprint Mills logs are transferred from road vehicles to rail wagons by an electric log stacker resembling a giant fork lift truck and capable of handling 45 tons in a single lift. The logs come from the Company's forest concessions of some 400,000 acres in the Styx and Florentine Valleys. Each of the log trains - a familiar sight in the picturesque Derwent Valley - consists of a rake of 24 specially designed rail wagons. The average weight of logs per train, hauled over a distance of 37 miles to Boyer, is 700 tons. Australian Newsprint Mills is probably the biggest single consignor of logs by rail in the Commonwealth and the annual tonnage has reached 260,000 with an additional 14,000 tons of cordwood.

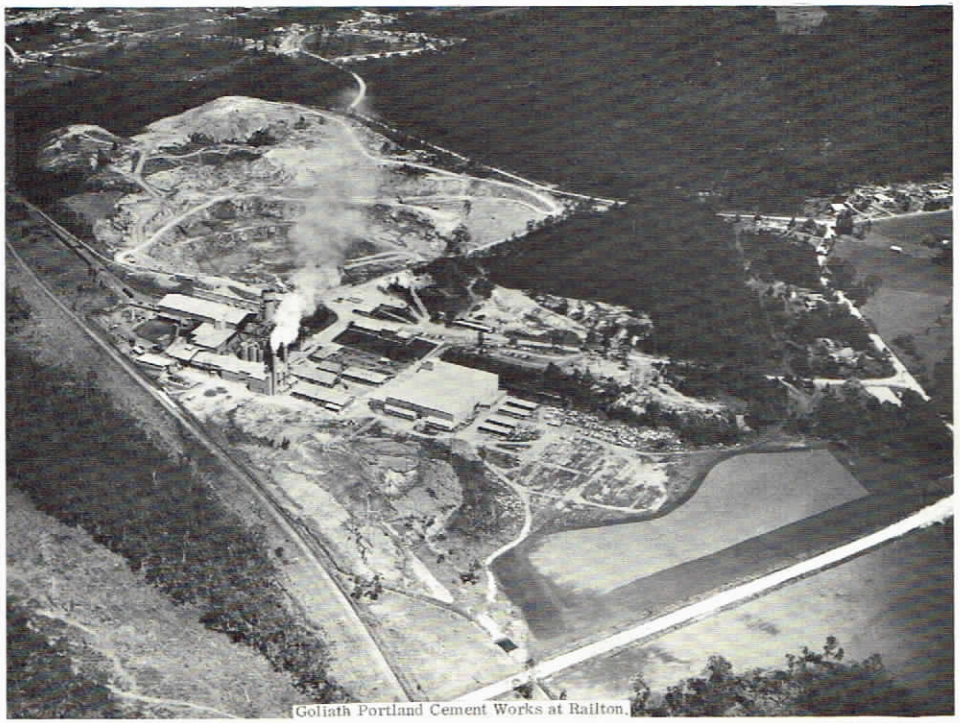
Sassafras logs are also transported by rail from Maydena to the Pioneer Woodware Company, a subsidiary of Australian Newsprint Mills, which manufactures clothes pegs at New Norfolk. For this purpose some 5,000 tons of logs are railed each year in wagons fitted with specially designed stanchions which release from the opposite side and make for safety in unloading operations.

Limestone, used as a raw material for a pulp bleaching agent, is railed from Maydena to Boyer in quantities of approximately 8,000 tons per annum.

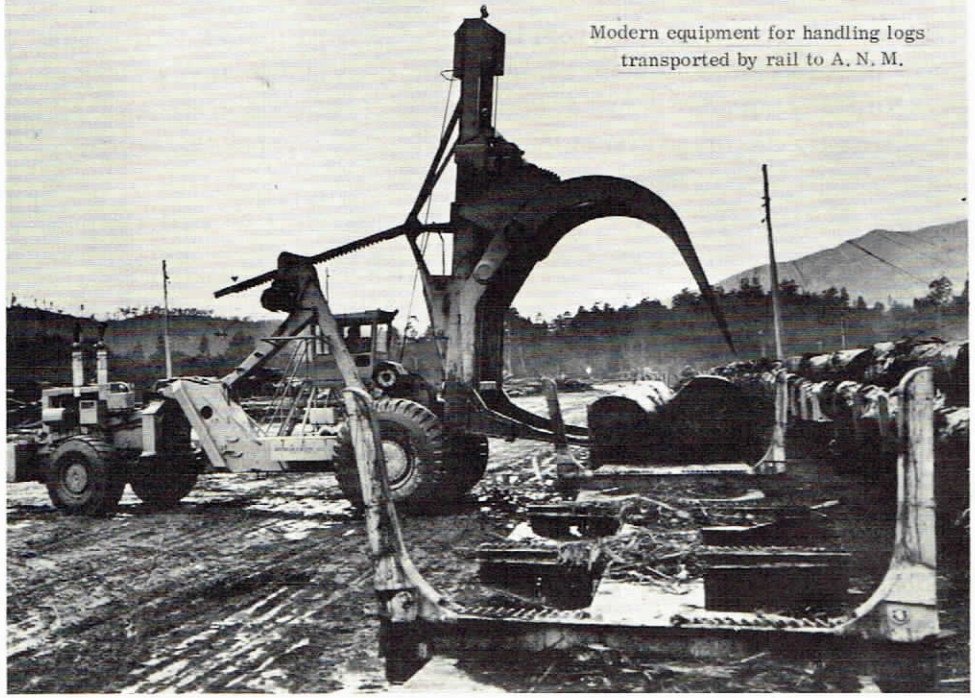
Located at the deepwater port of Burnie on the North-West Coast of Tasmania, Associated Pulp and Paper Mills Limited conducts a fully integrated industry based upon the use of Australian eucalypt timbers. At Burnie the company manufactures fine papers and magazine papers, printing and duplicating papers, writing and blotting papers, banks and bonds, base papers for processing, and through its wholly-owned subsidiary company - Ballarat Paper Mills Pty. Ltd. - makes coated papers and boards, art, chromo and label papers, friction glazed and gummed papers, coated boards and laminated papers, and produces china and superfine coating clays. Another subsidiary - Papermakers Limited - makes special wrappings, vegetable parchment, greaseproof papers, glassine and glazed imitation parchment. Hardboards Australia Limited (50% A.P.P.M., 50% C.S.R.) makes plain and processed BurnieBoard, Masonite, Timbrock etc. Burnie Timber Pty. Ltd. produces chips for pulp manufacture and kiln-dried sawn timber products for export to the mainland and overseas.



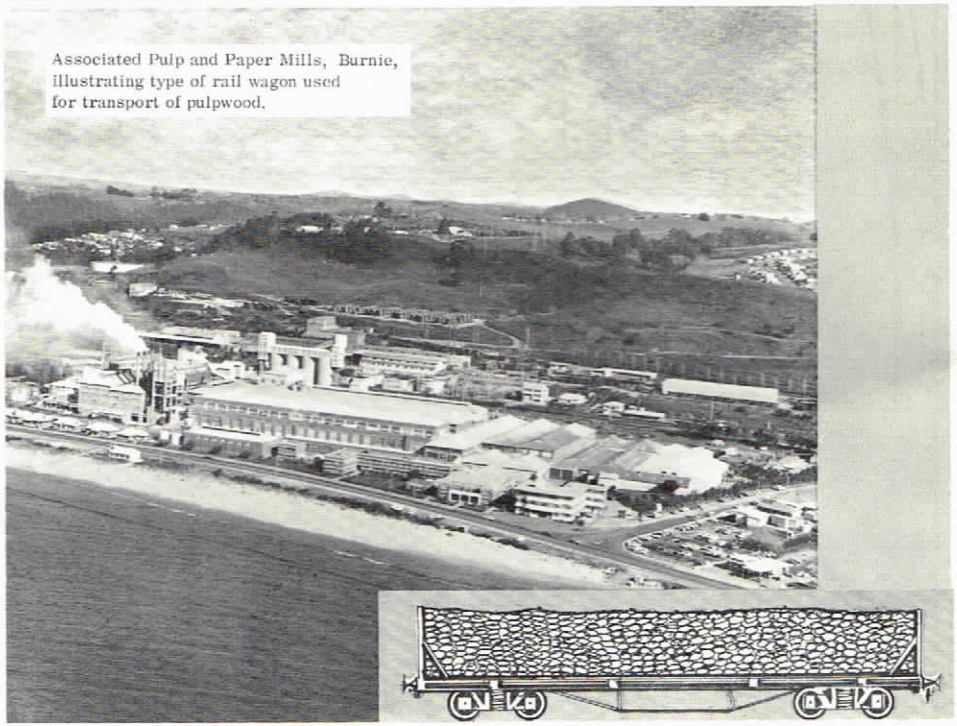
Australian Newsprint Mills Limited at its Boyer Mill produces 45% of Australia's newsprint requirements.



Goliath Portland Cement Works at Railton.



Modern equipment for handling logs transported by rail to A. N. M.

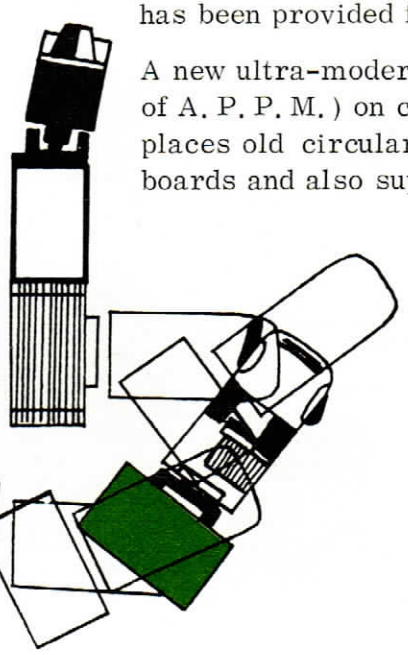


Associated Pulp and Paper Mills, Burnie, illustrating type of rail wagon used for transport of pulpwood.

The company makes pulp, the raw material of paper, from trees from its own forests and since the inception of the industry some 30 years ago, substantial quantities of pulpwood have been transported by the State-owned railway system and the Emu Bay Railway Company. The pulpwood, cut into 3'9" billets, is delivered direct to the mill at South Burnie in wagons specially designed to cater for this traffic with an average loading of 12 tons. More than 57, 000 tons of this pulpwood were carried by the Tasmanian Government Railways in 1968/69.

The plant at Burnie is large, even by world standards, yet until the late 30's a paper industry based on the Australian eucalypt did not even exist. The successful use of short-fibred Australian wood as the basic material for the manufacture of fine paper constitutes one of the great success stories of Australian industry. The company now supplies most of Australia's requirements in fine writing and printing papers.

A particle board mill established at Wesley Vale, six miles from the railhead at Latrobe and 36 miles east of Burnie, produces 20, 000 tons of flakeboard a year. The current expansion programme of Associated Pulp and Paper Mills includes a $20 million pulp and paper mill as the first stage of an integrated pulp and paper complex at Wesley Vale. The first paper machine for the mill will increase the company's paper capacity by 30%. Space has been provided for three more paper machines to be installed as required.



A new ultra-modern band-sawmill has been commissioned by Cumming Brothers Pty. Ltd. (a subsidiary of A. P. P. M.) on company land immediately behind the existing Burnie sawmill. This mill, which replaces old circular sawmills at Natone and Somerset, is designed to produce 4 million super feet of boards and also supplement the chip supply to the mill complex.

The Company currently employs 3, 600 persons on the North West Coast.

Whilst emphasis has been placed on the service provided by the Railways for some of Tasmania's largest industries there is of course a considerable volume of traffic handled on a day-by-day basis for trade and industry generally. Manures and fertilizers, mostly seasonal traffic, account for some 10% of the total tonnage hauled over the system. Of this some 100, 000 tons is superphosphate manufactured by the Electrolytic Zinc Co. of Australasia Ltd., at its Risdon plant near Hobart.

A substantial proportion of the superphosphate is handled in bulk, and off-loaded by means of mechanical grabs into road vehicles for delivery to agricultural and pastoral properties. The superphosphate is then spread by mechanical means on the ground or by aircraft. Partitions are fitted in some of the wagons used for the transport of bulk superphosphate to permit the total load to be divided into separate consignments.

The wagons can be converted to single loads by the removal of the partitions.

Ten-30 ton wagons are to be modified to provide a better load/weight ratio and more efficient facilities for the transport of superphosphate and containers. The modification will increase the load of these wagons to 44 tons.

Log timber from the bush and sawn and dressed timber from the mills is also transported in quantities to the order of 76, 000 tons per annum. A plastic wrap is now used on the strapped bundles of dressed timber in place of canvas tarpaulins. This affords protection for the timber during all stages of its movement whether interstate or intrastate.

The EMU BAY RAILWAY Co. Ltd

is associated with

the INDUSTRIAL DEVELOPMENT on the NORTH-WEST -COAST . . .

* Joint E. Z. Mt. Lyell, Acid Plant venture.
* Increased output from Rosebery E. Z. mine.
* Railing Mt. Lyell copper concentrate from the West Coast for shipment from Burnie.

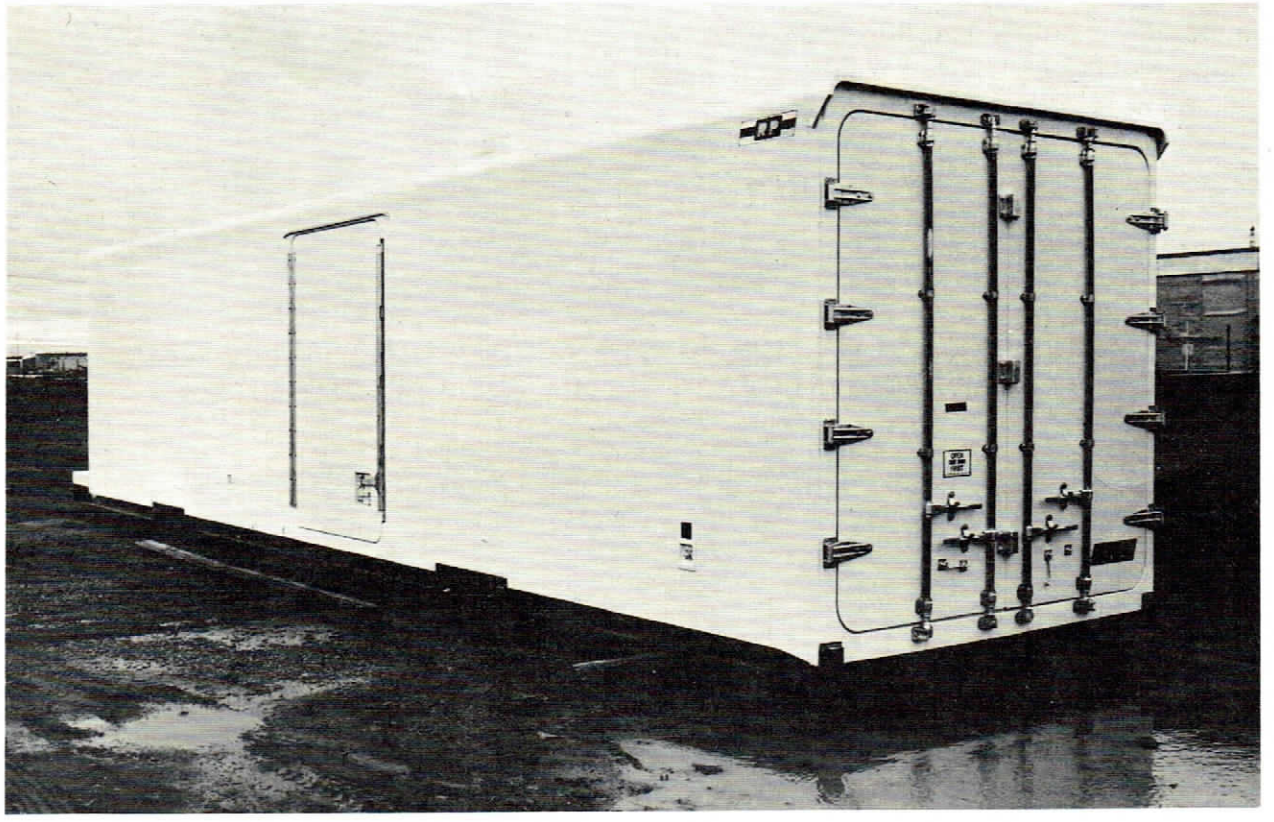
THE EMU BAY RAILWAY CO. LTD. BURNIE

INTERNATIONAL
TRUCKS, TRACTORS AND FARM EQUIPMENT

TASMANIAN TRUCK & TRACTOR PTY. LTD.

254 LIVERPOOL STREET, HOBART 23 7001
KINGSWAY LAUNCESTON 31 4555
181 BASS HIGHWAY, COOEE 31 1255

Reinforced Plastics Pty. Ltd., Fairbank Road, Clayton, Victoria 3168, Australia. Phone: 546 0011



AUSTRALIA'S LEADING MANUFACTURER OF FIBREGLASS REINFORCED PLASTIC

- VANS
- CONTAINERS
- TRUCK CABS
- TANKERS
- PANEL VANS
- Custom Moulding for the Transport and Automotive Industry.

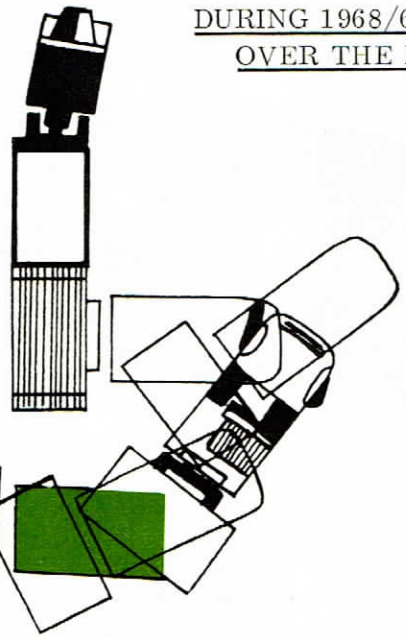
Reinforced Plastics Pty. Ltd. Moulders of Fibreglass reinforced Plastics have pioneered the construction of fibreglass reinforced containers. Following further research and development of fibreglass reinforced plastics they now supply Overseas Shipping Lines, Commonwealth and State Government Railways, Local and Interstate Operators with the latest world acclaimed, Lloyds of London approved, seamless 37' Fibreglass "One Piece Moulded" Road/Rail Refrigerated Container.

The units are constructed in fibreglass reinforced plastic with the inner and outer skins moulded in one piece. Between the skins a core material of rigid polyurethane foam is positioned. These containers are ideally suited to carry foodstuffs as there is no possibility of contamination by odour impregnation either into the container's sides or by transferral into the cargo itself. Damage to containers is minimal as it is the nature of fibreglass to localise and sustain any shock through impact. Consequently repairs are always a matter of simply sanding down a small area and rebuilding it.

AUSTRALIA'S LEADER IN FIBREGLASS TRANSPORT EQUIPMENT AND FIBREGLASS CUSTOM MOULDING.

The sawn timber industry is Tasmania's fourth largest secondary industry and, although the State has only 3% of Australia's population, it supplies 10% of its timber requirements. It provides almost as much timber as is imported from North America and considerably more than the total imported from all other countries. Annual production varies between 170 and 180 million super feet and exports from the State exceed 90 million nominal super feet. The value of the industry's production exceeds $32,000,000 and the value of its exports exceeds $15,000,000 Following the enlargement of the $\frac{3}{4}$-mile long Rhyndaston tunnel, structural clearances on the Hobart - Western Junction Main line, Western Junction - Burnie Western line, and Derwent Valley branch line have been increased to accommodate loads up to 14 ft. wide and 16 ft. above rail level. This will enable the generating plant associated with the Hydro-Electric Commission's Gordon River power development to be transported to a railhead at Maydena in the Derwent Valley from which it will be moved by road to the construction sites.

At Burnie an area of reclaimed land adjacent to the Marine Board's new ferry terminal is to be developed as a new goods yard and passenger station complex serving both local and interstate traffic needs.



DURING 1968/69 MORE THAN 1.24 MILLION TONS OF GOODS WERE TRANSPORTED OVER THE RAIL NETWORK EQUIVALENT TO 117 MILLION NETT TON MILES.

Here are some examples of the modern rolling stock and equipment now available to meet the need of industry:-

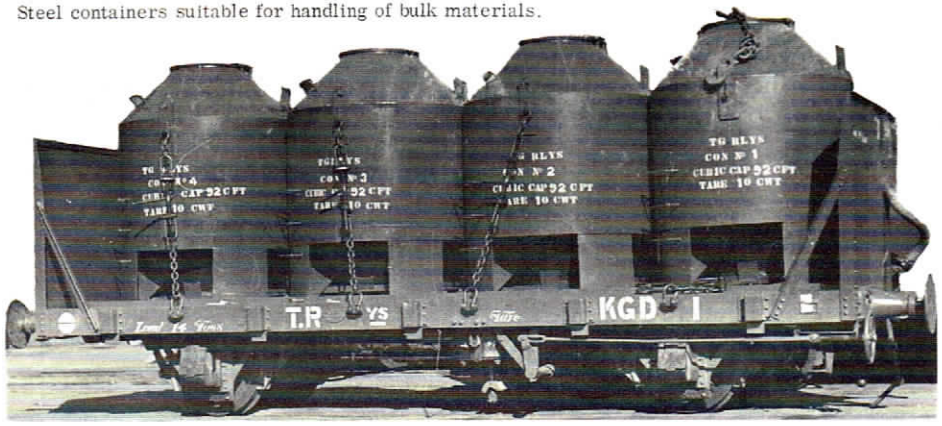
Steel wagons (CC and CCC class) with a capacity of 15 and 30 tons used extensively for the transport of bulk superphosphate from the Electrolytic Zinc Company's plant at Risdon, Southern Tasmania. In many of these wagons all apertures have been sealed to prevent the escape of superphosphate in transit.

A covered wagon (EES class) 36 ft. long with a capacity of 30 tons. This wagon has four spring-loaded steel roller doors on each side and three bulkheads divide the interior into four compartments. It was designed especially for palletised freight but may be used for all classes of freight. Each compartment will take four standard 46" pallets. There is also a smaller version (ES class) of 12-ton capacity with two loading compartments.

Steel containers with a capacity of 92 cu. ft. suitable for the bulk handling of superphosphate, cement, grain etc. Weatherproof concrete lids are provided at the top and discharge is by means of mechanically-operated sliding doors at the bottom. These containers can be lifted by crane.

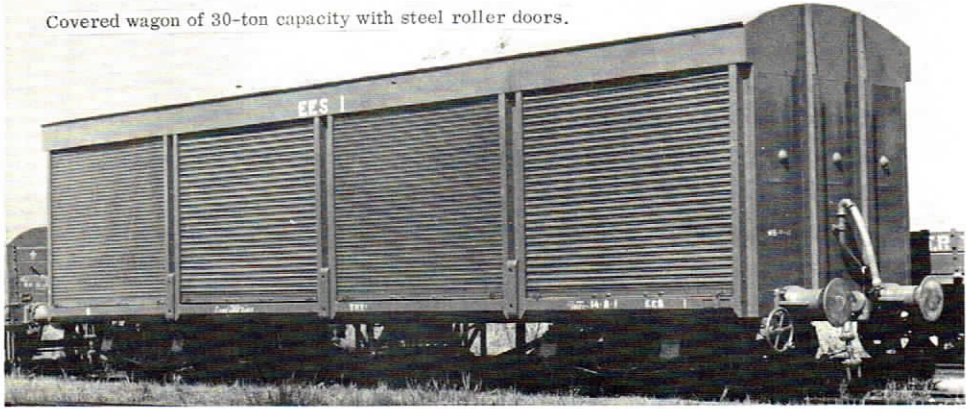
A tank-type steel container designed for transporting tallow in bulk by rail. It is fitted with steam heating coils and a steam jacket cover to the lower portions of the tank. The container, with a capacity of 1,300 gallons, has a maximum weight-load of 5 tons 10 cwt. and may be lifted by fork lift or crane.

Steel containers suitable for handling of bulk materials.



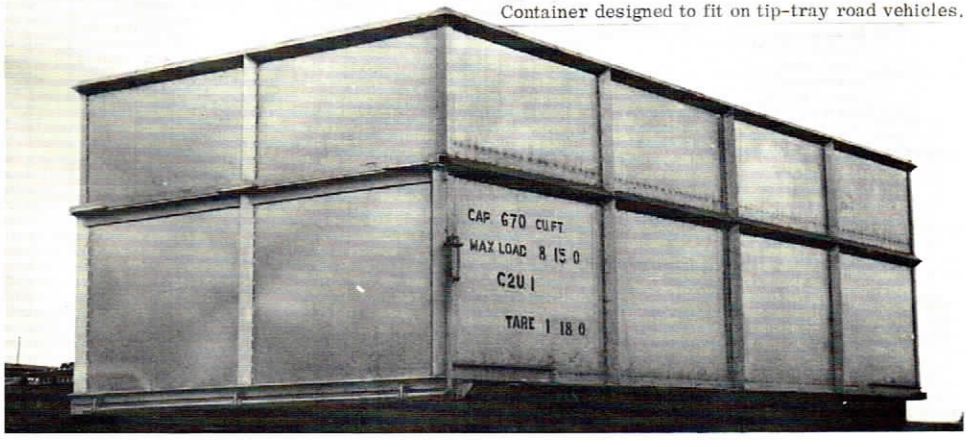
Tank-type steel container for transport of tallow in bulk.

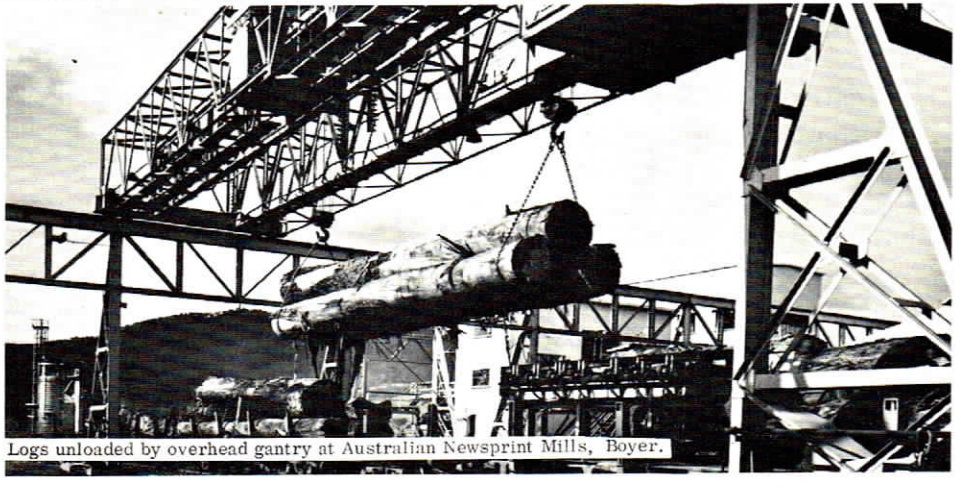
Covered wagon of 30-ton capacity with steel roller doors.



Bulk superphosphate is unloaded by mechanical grab.

Container designed to fit on tip-tray road vehicles.

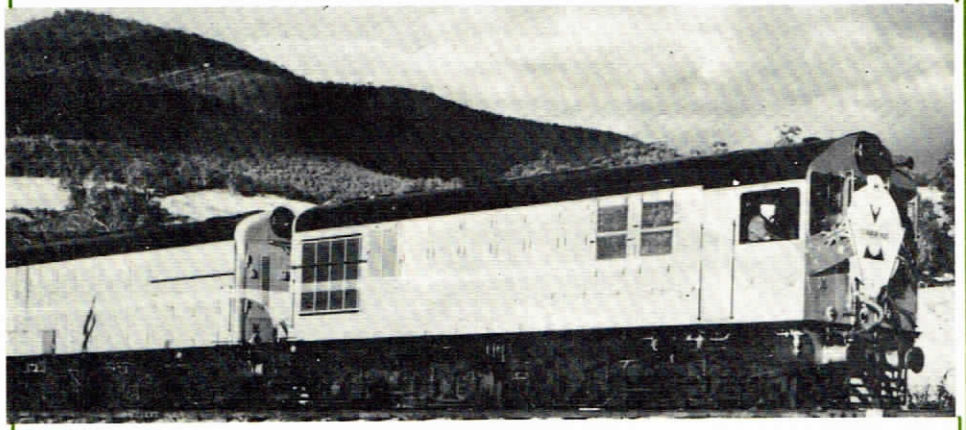




Logs unloaded by overhead gantry at Australian Newsprint Mills, Boyer.

Westinghouse Brake Systems

A decade has passed since the introduction of the Tasmanian Rail/Ferry Service during which time it has played a major role in the industrial welfare and development of the State. The Tasmanian Railway's important contribution to this development has necessitated a keen awareness of the need for increased efficiency and reliability in all aspects of rolling stock activity.



WESTINGHOUSE BRAKE (AUSTRALASIA) PTY. LTD., in recognition of such requirements, are continuously involved in the development of railway brake systems in order to provide the latest advancements in brake equipment.
Since the very beginning of the Tasmanian Railways service Westinghouse vacuum brake equipment has been fitted to the locomotives and rolling stock. New additions to this rolling stock fleet are to be equipped, in part, with the highly regarded SVENSKA AKTIEBOLDGET BROMSREGULATOR (S. A. B.) brake equipment for which WESTINGHOUSE is the exclusive Australian manufacturer and distributor.

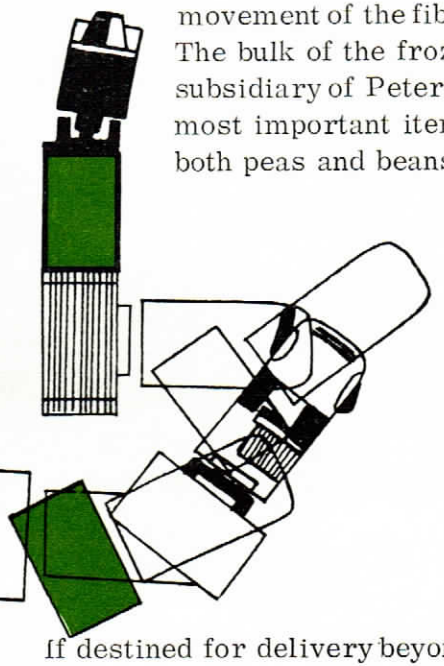
Westinghouse Brake (Australasia) Pty. Ltd., Concord West, Sydney.
Manufacturers and Suppliers of Railway Braking Systems, Compressors, Vigilance Control Systems, Door Operating Equipment, Pneumatic Controls and Wheel Slip Control Equipment, etc.

A fully enclosed steel container suitable for general purpose goods carrying. This container has a capacity of 2 tons 11 cwt. and is fitted with a door which can be locked for security. For ease of handling four containers can be loaded onto a railroader base and off-loading can be effected at different points. These units can be handled by crane or fork lift.
A container with a 3' high swinging door at one end designed to fit on a tip-tray road vehicle. This container has a capacity of 670 cu. ft. or 8 tons 15 cwt. in weight and is most suitable for the transport of sand, gravel, etc.
A pallet 8' x 7'6" with ends and removable sides about 5' high. This pallet provides a convenient facility for the movement door-to-door of cartons, bagged goods and such like. It is so designed that movement of goods in transit is kept to an absolute minimum. It has a maximum weight capacity of 5 tons and is generally handled by fork lift. A pallet of wood and steel construction for the transport of gas cylinders. With an average capacity of 3 tons, this pallet has removable boards at one end to assist loading and discharge. Transfer can be effected by fork lift or crane.
To keep pace with these modern developments in rolling stock and equipment, gantries, cranes, hoists and fork lifts have been provided at many depots throughout the system. Some 20 fork lift trucks are now available with maximum lift capacity varying from 2,000 up to 50,000 lbs. There is also a variety of travelling and fixed gantries, jib cranes and hoists capable of handling lifts from 3 tons to 30 tons.
The Railways, advancing with the times, are in a position to offer sound advice to any industry faced with a transport problem. Experienced officers are available to recommend the type of equipment most suitable for the movement of particular products both Intra-State and Inter-State.
A list of senior Railway officers appears on Page 32.

THE RAILWAYS' INTERSTATE SERVICES

Firmly established in the field of interstate transport the Rail Ferry Service is closely linked with the roll-on, roll-off ferries of the Australian National Line and the network of the Mainland railway systems.
Since it was introduced in 1959, in association with the Fleetways Group of Companies, Melbourne, there has been a substantial increase in the amount of traffic handled by the Rail Ferry Service and in the past few years the annual tonnage has been in excess of 100, 000.

The container fleet of the Tasmanian Government Railways includes 630 pallet-type units known as railroaders and used extensively for the transport of potatoes, apples and timber on the forward journey and backloaded with general cargo of all descriptions. The railroader consists of a flat top tray having an external measurement of 14'5" in length 7'11½" in width and is fitted with side and end fencings to heights of 4'3" and 4'10" respectively.
More than 100 refrigerated containers, mostly of fibre glass construction, with a capacity of 740 cu. ft. are involved in the movement of frozen vegetables and other frozen foodstuffs to Melbourne and Sydney. The average movement of the fibre glass containers is 2,000 trips per annum with a net load of 10 tons per container.



The bulk of the frozen vegetable traffic is handled on behalf of Gordon Edgell Pty. Ltd., Devonport, a subsidiary of Petersville Australia Ltd. This company has installed equipment worth about $200, 000 the most important item being a new Flo-freeze tunnel costing approximately $160, 000. It will be used for both peas and beans and will supplement the existing unit. Freezing capacity will now be in excess of 20, 000 lbs. per hour. It is anticipated that increased quantities of peas, beans and brussel sprouts, cauliflower and root vegetables will be processed during forthcoming seasons.

The Ulverstone factory of International Canners Pty. Ltd., another subsidiary of Petersville Australia Ltd., is now engaged entirely in vegetable freezing, and peas and beans are processed during the season, supplementing the work at Devonport. However, the main activity at Ulverstone is the processing of Tasmanian potatoes in the largest and most modern plant in the Southern Hemisphere.
Today a continuous stream of agricultural produce is shipped on ferries and container ships sailing from Tasmanian ports to the capital cities of the other States. These services have developed markets which previously could not be reached by Tasmanian producers.
If destined for delivery beyond Melbourne the containers ferried across Bass Strait are road-hauled by Fleetways to the interstate goods yard of the Victorian Railways for transfer to flat top wagons. So streamlined is the entire operation that traffic consigned by the Rail Ferry Service from Northern Tasmanian ports reaches Sydney from Melbourne overnight in time for the morning markets.
To keep pace with the growth of traffic between Tasmania and New South Wales communications have been speeded up. A Telex service is now in operation between Launceston and Sydney, while multi-channel carrier telephone systems between Melbourne and Sydney provide subscriber trunk-dialling for transport officers operating the Rail Ferry Service.

Electric power for the refrigerated containers railed between the two mainland capitals is provided by an inbuilt generator carried in the train's brake van. From here power is distributed to the special rail wagons fitted with power outlets into which the containers are plugged, thus ensuring the pre-determined temperature being constantly maintained. On the voyage from Tasmania the ship's power supply is used.

The Rail Ferry Service combined with the rail facilities available on the mainland enables Tasmanian freight to reach any market in Australia without the frustrating delays experienced in the past and because of the Railway's basically low rate structure it is more economical than any other form of transport.

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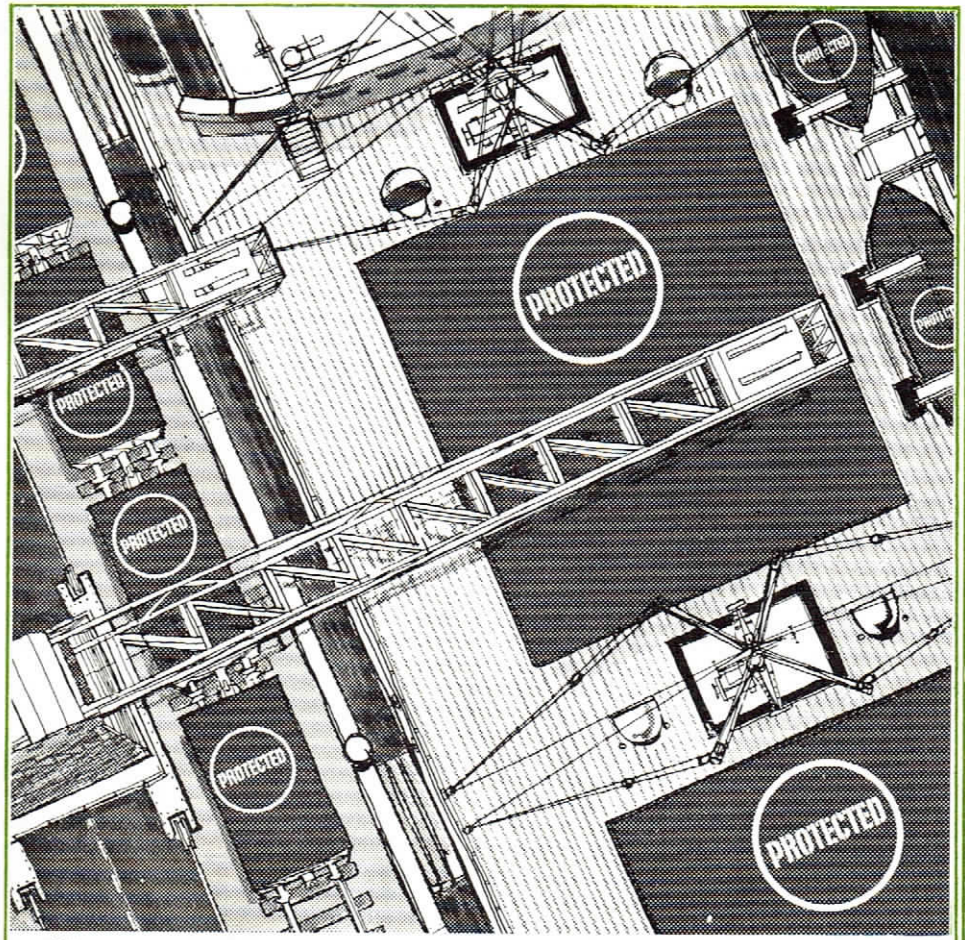

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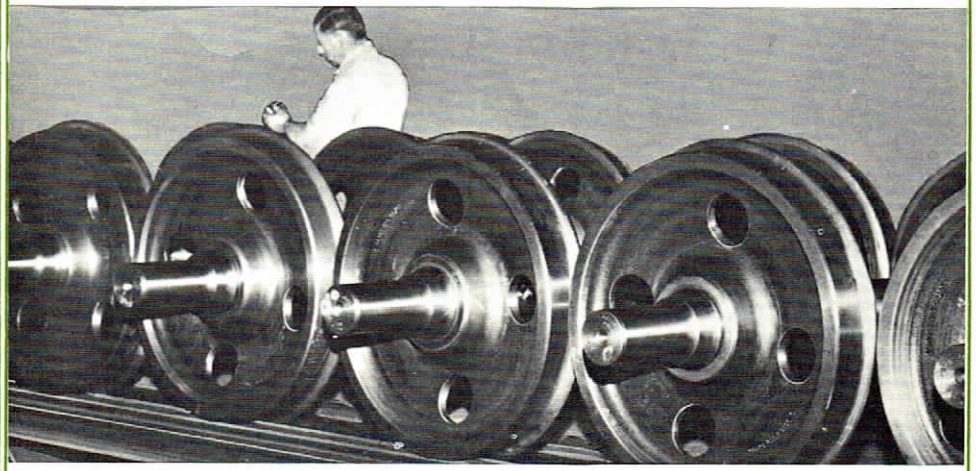

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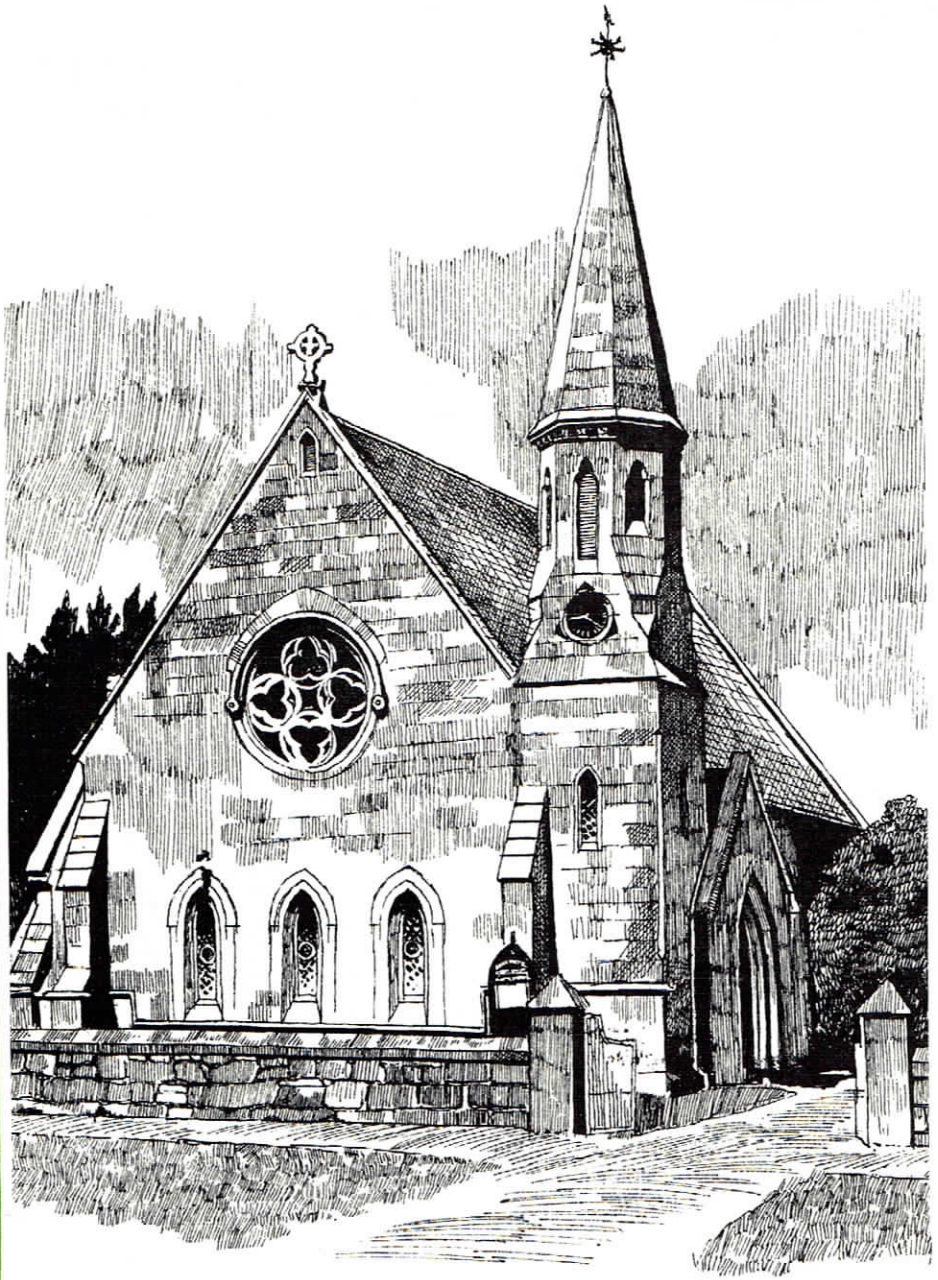
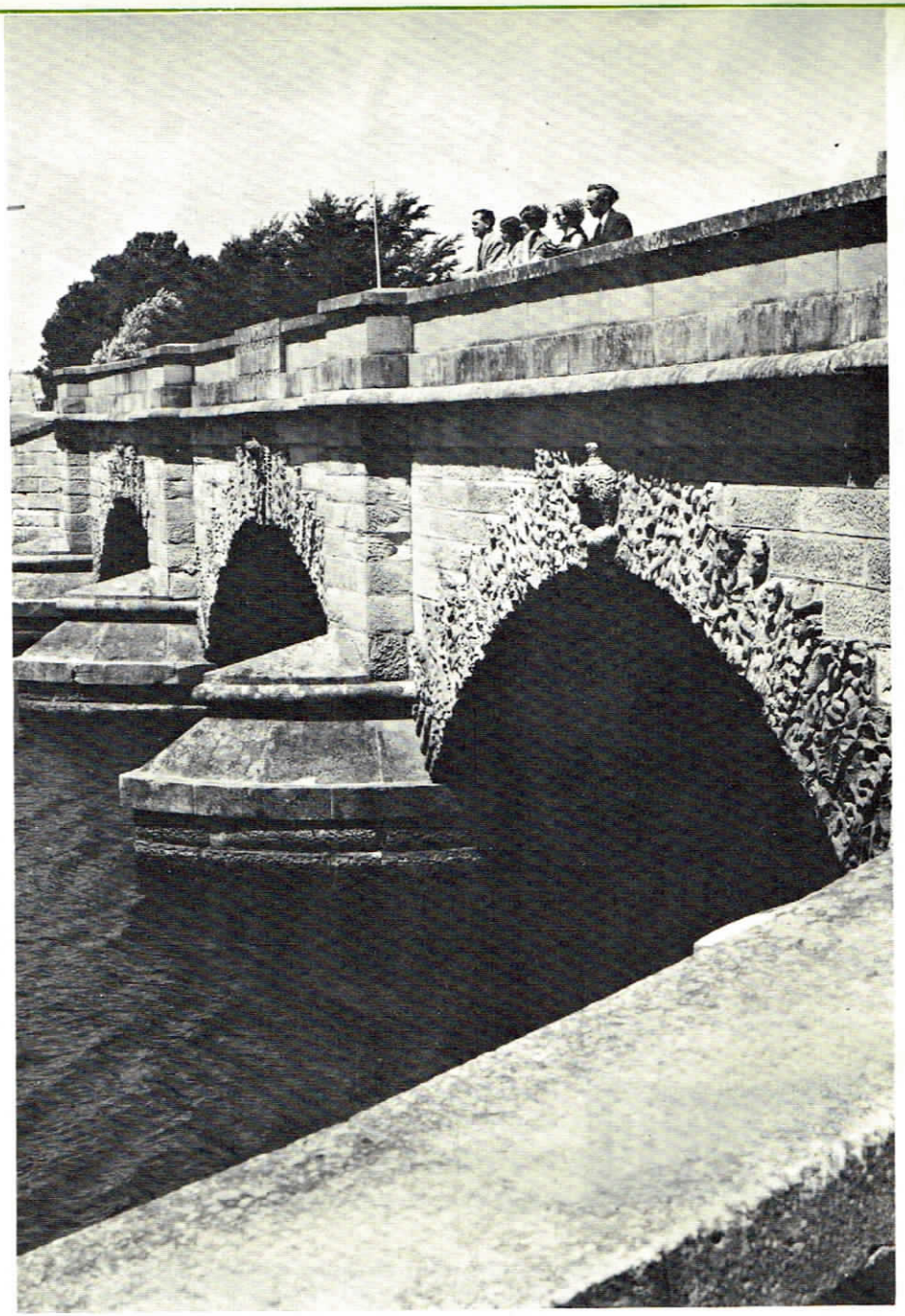
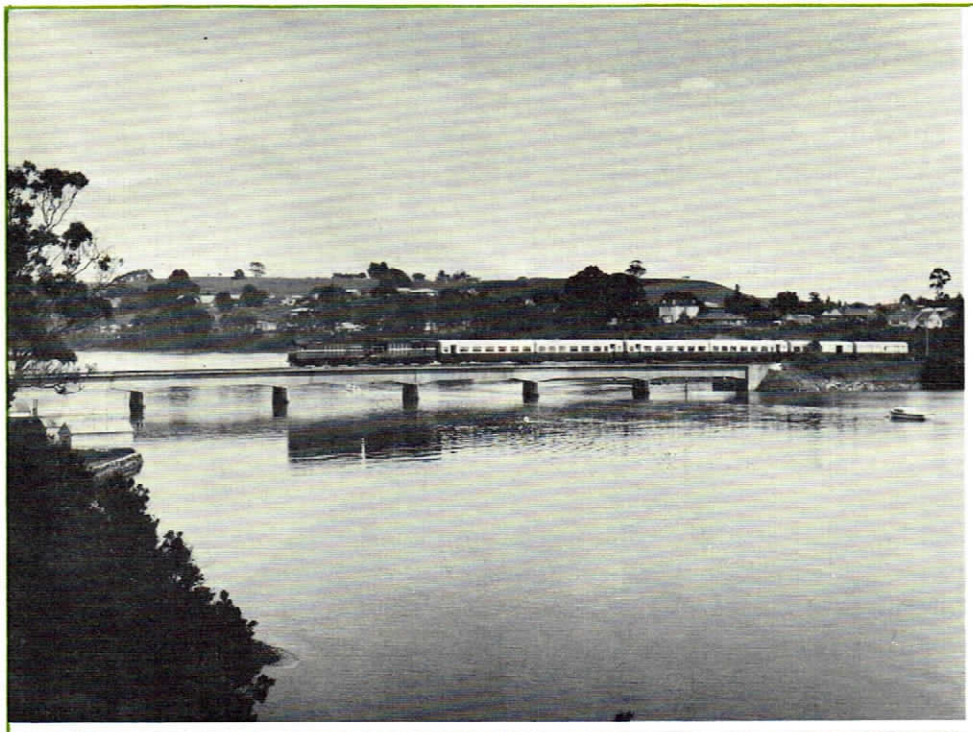
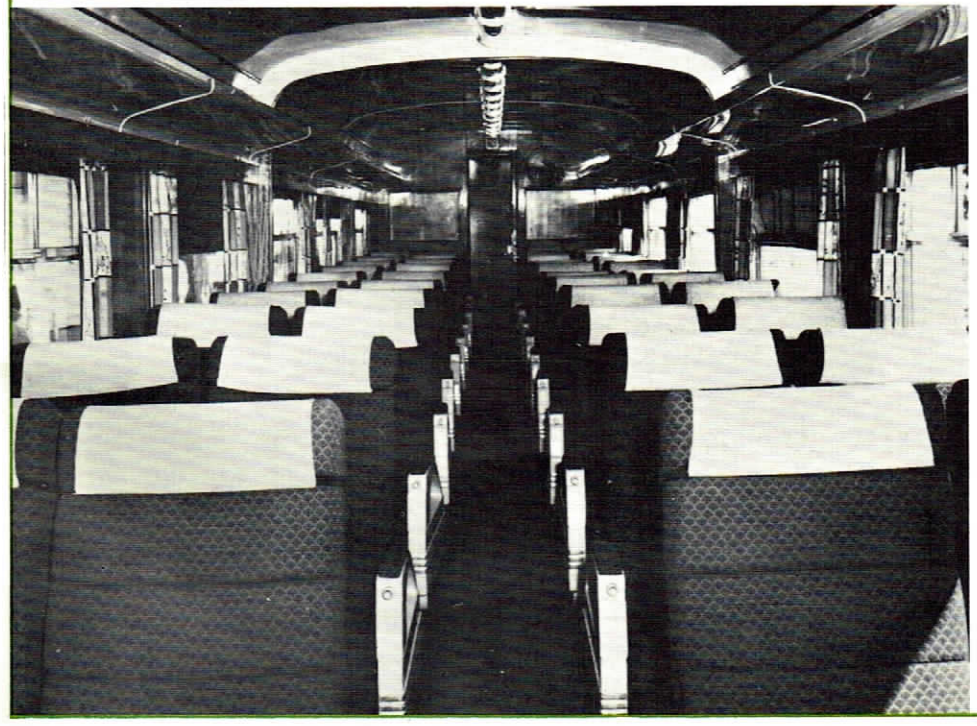


One of the historic churches at Ross.



Stone arch bridge at Ross.



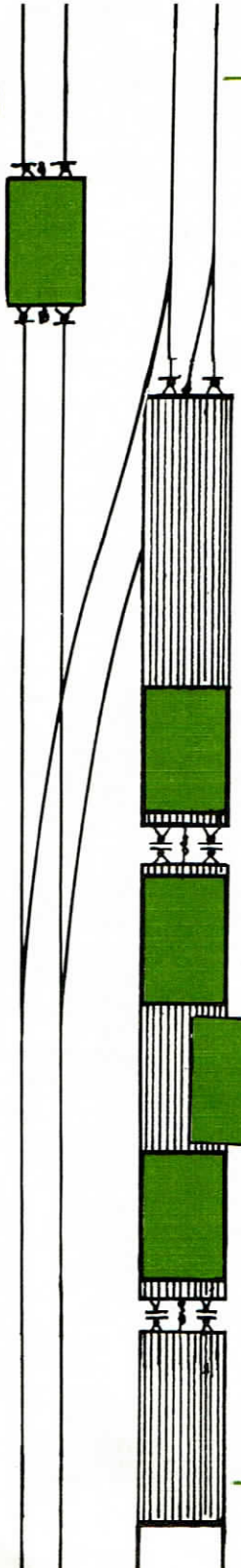


'TO GAZE UPON THE PASSING SCENE....'

Not the least of Tasmania's natural assets is its varied and beautiful scenery with a landscape strongly reminiscent of England. Rugged mountains, picturesque lakes and rivers, rich farmlands, a bold coastline and cities and towns combining all that is new with historic features of the past - all this delights the eye when travelling on the "Tasman Limited" with its twin-articulated saloon coaches and wine and dine service.

The "Tasman Limited" connects Hobart with Launceston and the principal towns of the North-West Coast and all travel is first class! Its standard of comfort is well up to that of daylight express services in other States and there is no extra charge for booking. The "Tasman" has all the facilities necessary to enable the family to travel as a unit and there is a Hostess to look to the personal needs of passengers as well as to inform visitors of points of interest along the route. During the Summer months the "Tasman" provides day return trips from Hobart to Ross, formed as a military station in the very early days of the colony and named by Governor Macquarie in 1821. A guide is available to show visitors the historic features of the town including the stone arch bridge constructed in 1836.

Sunday excursions are also run on a limited scale, including the popular trip to the Derwent Valley and National Park.

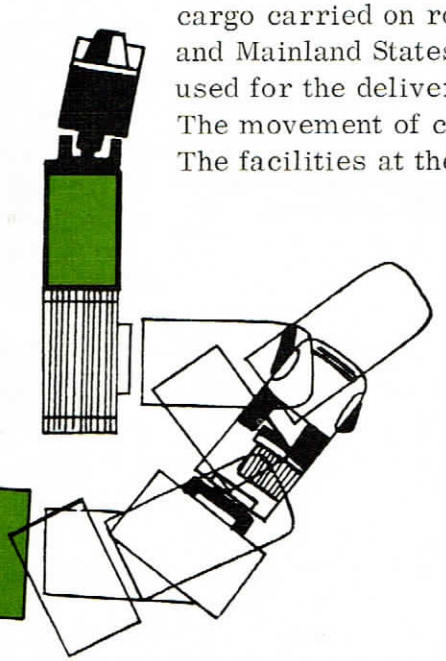


THE FLEETWAYS GROUP OF COMPANIES

The main depot of the Fleetways group of companies at Port Melbourne can well be described as the nerve centre of Rail Ferry Service operations on the Mainland. Spread over 4½ acres the depot, fully concreted comprises cargo handling stores, administrative offices and maintenance workshops. It is, in effect, the hub of the Fleetways Australasia-wide organisation.

Railroaders and containers are handled at the depot by 22 ton and 12 ton forklifts. Suitable units are available for the unloading of incoming cargo and distribution of freight from Tasmania and other States to its destination in the city or suburbs. Storage facilities, both bonded and free, are available at the depot. Fleetways has up to 150, 000 sq. ft. of cover storage space in the Port Melbourne and South Melbourne districts. The main bond store is 50,000 sq. ft. in area fitted with fire and burglar alarms. All the storage buildings are of double brick construction.

Fleetways administrative offices not only supervise the Melbourne section of the sea-road division but also control the company's fleet of some 150 local cartage trucks which are available for the distribution of all types of cargo carried on roll-on roll-off or container vessels. Telex communication with all parts of Tasmania and Mainland States, speeds the movement of traffic through the Fleetways depot. The fleet of vehicles used for the delivery of new cars to points as far north as Queensland is also controlled from the depot. The movement of cars is to the order of 700 per day.



The facilities at the depot include provision for holding cargo and an area is set aside for connecting both heated and refrigerated containers to the main power supply. One of the principal advantages of the depot in the Port Melbourne area is its proximity not only to the Webb Dock, base of the Australian National Line's interstate and overseas container operations, but also to the main docks in the river and the wharves at the Port of Melbourne. The completion of the Lower Yarra crossing will improve the means of access to the new overseas container berths at Swanson Dock.

Other Fleetways depots are located at Dandenong and Broadmeadows and these assist the company in providing an effective coverage over the expanding areas of Melbourne.

There is also an office at the Dynon goods yard where members of the staff are on permanent duty to aid in the transfer of containers of general and refrigerated cargo forwarded through the rail systems of the Commonwealth. All these services are also available at Fleetways Sydney and Brisbane depots as well as at Adelaide and Fremantle.

Adjacent to the main depot is another of the Fleetways group of Companies, The Fleet Forge Pty. Ltd., which has been closely associated with the design and construction of railroaders and the many types of containers used on the standard base. Fleet Forge is one of the main marine engineering companies in Melbourne and, in addition to containers, specialise in tank building, crane work and all types of heavy engineering. Across the river are Fleetways associated companies, United Stevedoring Pty. Ltd. and The United Ship Services Pty. Ltd., which work in close conjunction with other companies in the group especially in those case in which heavy lift cargoes and transhipments are involved.

Fleetways officers responsible for Rail Ferry Service operations are: Mr. C. E. L. Bright, Director. (69 5231)

Mr. G. A. Stuart, Liaison Officer. (64 3741)

The Fleetways Group of Companies, Main Depot, Port Melbourne.

THE 'SEAROAD' SERVICE OF THE AUSTRALIAN NATIONAL LINE

The Australian National Line's "Searoad" service, which has stimulated the Tasmanian economy, celebrated its tenth anniversary in 1969 with a major expansion when "Australian Trader", a big sister for the durable "Princess of Tasmania", came into service.

Unlike the "Princess", which terminates at Devonport, the "Australian Trader" alternates visits to Devonport, Bell Bay and Burnie in her three round-trips weekly from Melbourne.

"Australian Trader" has added a new dimension to tourist travel across Bass Strait, as well as providing urgently needed extra tonnage. Her cargo capacity of about 2,300 tons has relieved the pressure on the "Princess", "Bass Trader", "Empress of Australia" and the small support ships which carry well over one million tons of cargo a year between Tasmania and the mainland. The vehicle decks are about the same size as those of "Empress of Australia" and, in addition, the vessel has a crane deck aft with a capacity of 30 unit loads.

In 1959, when the Australian National Line coined the word "Searoad" to describe its new roll-on roll-off service between Melbourne and Devonport, it was obvious to most observers that an improvement in the Tasmanian trade with Mainland States would result from the introduction of modern cargo handling methods. What was not obvious, nor indeed seriously considered, was the astonishing growth in trade across Bass Strait in just a few short years, brought about entirely by the "Searoad" concept of cargo shipment.

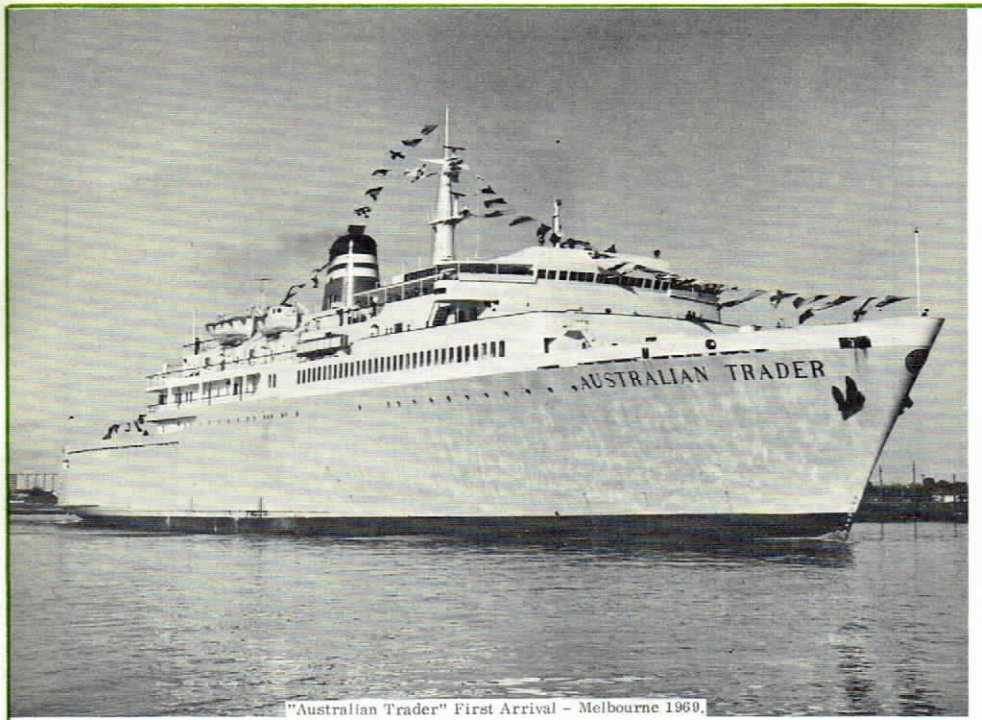
The last year in which cargo across Bass Strait was handled exclusively by conventional ships was 1959. Mostly of the 500 ton coastal type, these small vessels took up to 25 hours for the crossing, spent two or more days loading and a similar period in discharging, with the result that a consignor's goods were six days or longer in transit from door to door for a distance of possibly less than 300 miles. In 1959 A.N.L. vessels carried less than 130,000 measurement tons of cargo between Tasmania and the Mainland. This trade had scarcely varied from year to year and comprised largely produce and timber in one direction, and consumer goods in the other.

In October, 1959, the "Princess of Tasmania" was commissioned. She was the first roll-on roll-off ship to be introduced on the Australian coast and this was the inauguration of the "Searoad" Service. The effect of the "Princess" and the roll-on roll-off ships that followed can be seen in the following table of "Searoad" tonnages across Bass Strait.

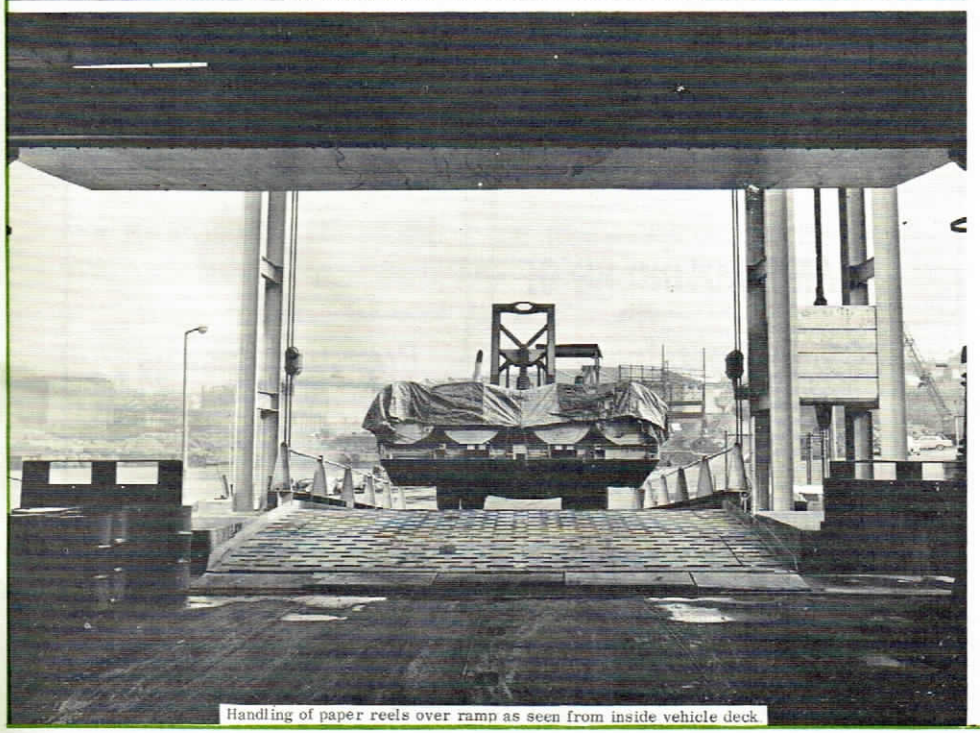
"SEAROAD" TONNAGES, 1959/60 - 1967/68.
(excluding accompanied vehicles)
- measurement tons.

	Commercial Cargo	Trade Vehicles	Total
1959/60	128,391	22,069	150,460
1960/61	256,377	32,903	289,280
1961/62	448,745	54,574	503,319
1962/63	566,002	71,276	637,278
1963/64	773,415	78,354	851,769
1964/65	861,706	80,010	941,706
1965/66	1,063,811	89,850	1,153,661
1966/67	1,178,690	89,685	1,268,375
1967/68	1,166,524	102,697	1,269,221

"Australian Trader" is more than just another ship for Bass Strait. She heralds a major expansion in the "Searoad" service. Three more specialist vehicle deck ships came into operation for the A. N. L. in 1969 - two for the Queensland service and one for Japan. The expanding range of services provided by the A. N. L. around the Australian coastline and its growing participation in overseas trade provides Tasmanian exporters with access to a wider range of markets both within Australia and overseas.



"Australian Trader" First Arrival – Melbourne 1969.



Handling of paper reels over ramp as seen from inside vehicle deck

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It all started with our Bass Strait ferry, "Princess of Tasmania". Then came the Bass Strait cargo vessel "Bass Trader". Next, the Sydney-Tasmania liner "Empress of Australia". And more recently the Bass Strait passenger/vehicle deck ship "Australian Trader".

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Head office: 73-79 Riverside Avenue,
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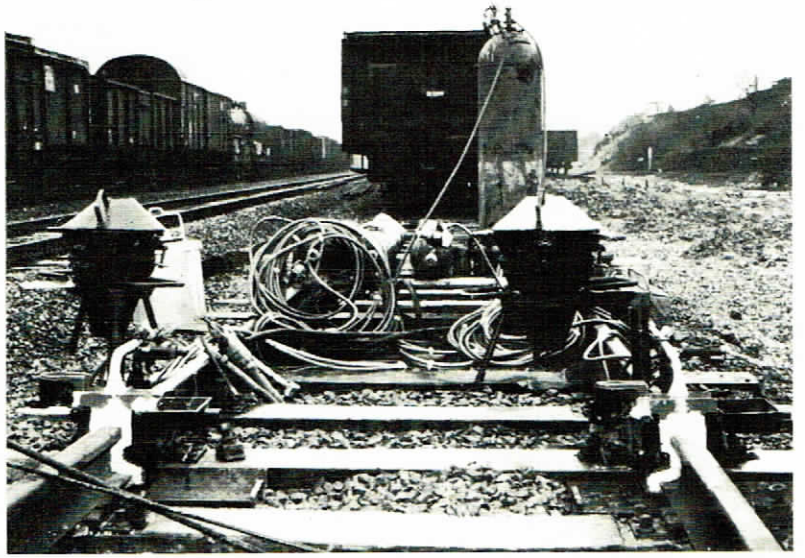

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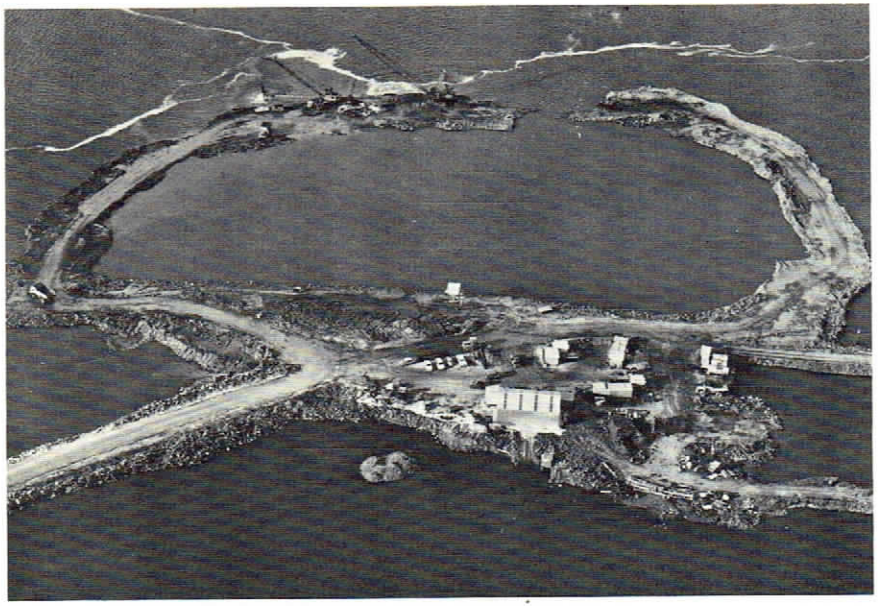

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PORT OF LAUNCESTON AUTHORITY

PORT DEVELOPMENTS IN NORTHERN TASMANIA

LAUNCESTON

There has been constant development by the Port of Launceston Authority during the past five years to match industrial progress, particularly in the vicinity of Bell Bay where Comalco Aluminium has increased its production as well as establishing a new by-product, aluminium paste. With the construction of the thermal power station in the Long Reach area it has been necessary to make provision for the berthing of large tankers to supply its oil needs. Coats Patons have established a new factory at George Town and negotiations for the establishment of a wood chip plant in Long Reach are well advanced.

To meet the requirements of the Temco plant at Bell Bay a new 500 ft. concrete berth was constructed in 1964/65 capable of storing some 3,000 tons of bulk materials. These bulk shipments are handled on the wharf by a $12\frac{1}{2}$ ton kangaroo pouch crane. On the western side of the river the Inspection Head berth was extended to improve facilities for fruit and general cargo shipments. This extension provided an additional 610 ft. of concrete wharf with its own approach as well as new storage sheds and office accommodation.

The ferry terminal at Bell Bay for the Melbourne - Sydney cargo/passenger ships has been extended in area and a new 25 ton travelling crane installed to provide better handling facilities for container traffic. The $17\frac{1}{2}$ ton crane that pre-

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TASMANIAN PORT OF ORIGIN OF THE CONTAINERISED AND UNITISED CARGO SERVICE

MARINE BOARD OF DEVONPORT, FORMBY ROAD

Photo: Vern Reid.

viously served the ferry terminal was moved to the Launceston berths and now assists the handling of general cargo and containers. Cool store and freezer chambers have been established for fruit, butter and meat storage whilst tallow tanks have been built to allow for storage and bulk loading of tallow from the port. A new $600,000 tug of 217 tons with a bollard pull of 21 tons was added to the Authority's fleet in 1967.

The major work undertaken by the Authority is the Channel Improvements Scheme, started in 1964 and due for completion in 1971 at a total cost of some $3,000,000. Two of of the four stages that have been completed provided an increase in the draft of shipping to 34 ft. and the third and fourth stages are designed to increase the draft to 38 ft. The major work is the removal of a large portion of Garden Island in the lower reaches of the Tamar river opposite George Town with an area of about nine acres. Some 680,000 cubic yards of material is being removed from the island. Excavation was commenced by dry quarry methods using the periphery of the island as a coffer dam. The quarry was then flooded and the wall is being removed by a 6 cubic yard dragline.

The port complex offers the shipper and the industrialist the choice of three terminals - Bell Bay, Beauty Point and Inspection Head - seven miles from the harbour entrance, and the city wharves located 30 miles upstream in the heart of Launceston. Additional harbour services include Tasmania's sole graving dock and the State's only explosives wharf. Combined with the port facilities are good access roads to railheads and all parts of Tasmania.

DEVONPORT

The port of Devonport has experienced a decade of intense development with an estimated three-fold increase in cargo tonnages between 1959 and 1970. To keep pace with and cater for the large increases the Marine Board of Devonport has in this period spent about $6 million on capital works.

The dramatic increase in cargo tonnage has been largely brought about by the rapid development of trade between Tasmania and the Mainland allied with revolutionary improvements in cargo handling.

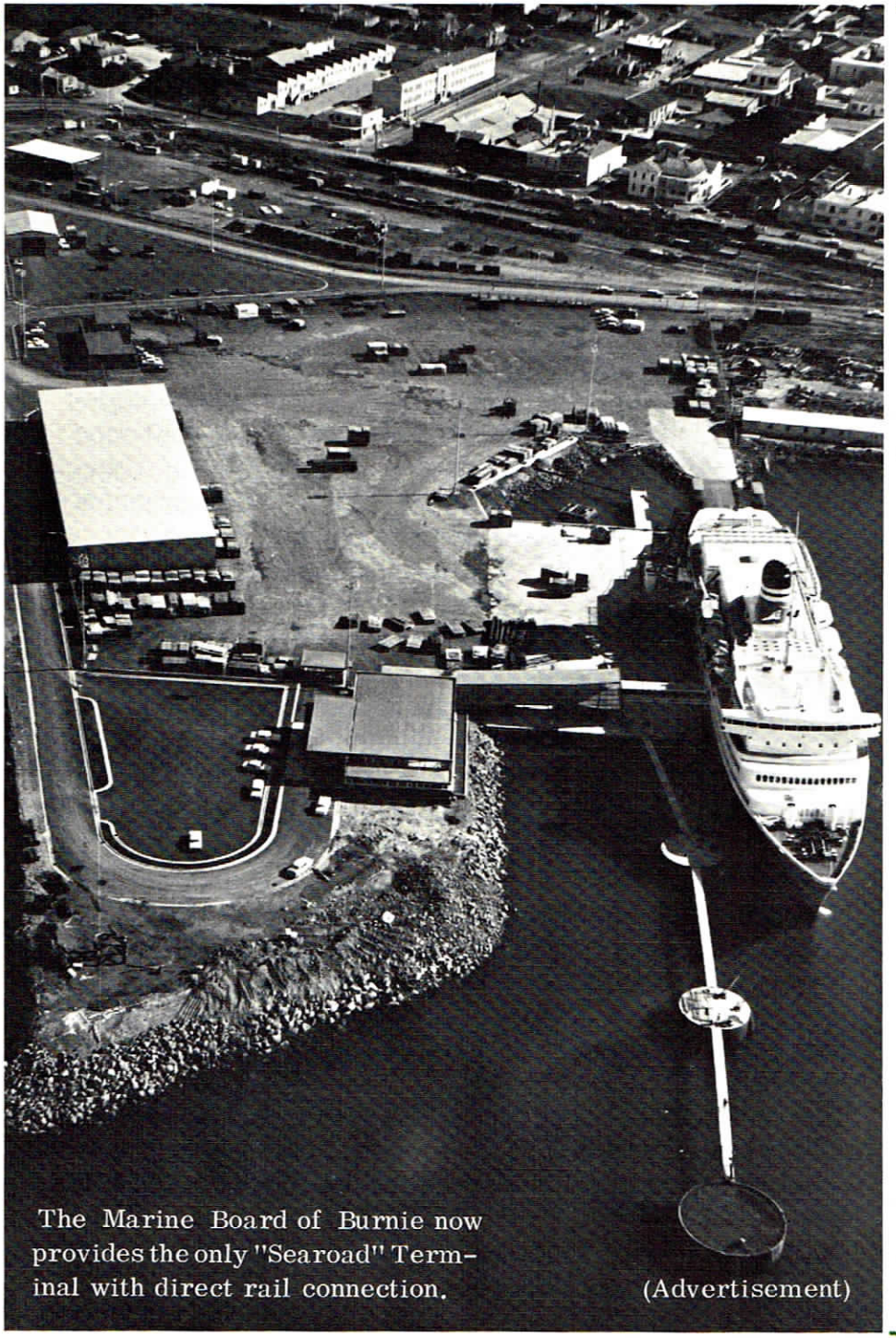
The works programme between 1959 and 1969 included channel and berthage improvements, provision of marshalling areas and facilities to cater for container and unitised cargoes, a large waterfront cold store, construction of a new tug, facilities for handling bulk shipments of cement and construction of extra berths on both the eastern and western side of the river.

Additional traffic followed the construction period of the Mersey-Forth project of the Hydro-Electric Commission and the development of the Wesley Vale complex of Associated Pulp and Paper Mills, together with the expansion of many well established local industries.

To cope with the growth of food processing industries on the North-West Coast the Marine Board decided on the construction of cold storage facilities as the first stage of wharf extensions in 1963-64. The building has a total storage capacity of 330,000 cu. ft. Devonport was Australia's first containerised port and the first to provide bulk handling and loading facilities for cement.

The Bass Strait ferry service of the Australian National Line commenced in 1959 with the "Princess of Tasmania" operating the sea-road service between Melbourne and Devonport thrice weekly. This was the first full scale application of the roll-on roll-off system in Australia and since its introduction more than 3 million tons of cargo has been moved between Melbourne and Devonport whilst some 600,000 passengers, mostly with their cars, have travelled by sea-road.

The Marine Board is fully aware that container and unitised cargoes need vast marshalling areas if the operation is to work at greatest efficiency. With this in mind the Board has provided a new berth 700 ft. long and backed by approximately ten acres of land just south of the "Princess of Tasmania" terminal.



The Marine Board of Burnie now provides the only "Searoad" Terminal with direct rail connection.

(Advertisement)

BURNIE

When information was received in the late fifties that Burnie was to be included in the itinerary of the Australian National Line's new roll - on roll - off lift - on lift - off vessel "Bass Trader" the Marine Board was posed a major problem as to where to locate the necessary facilities. It was decided to use the inshore end of Ocean Wharf which was strengthened to carry a 40 - ton lift crane with an auxiliary lift of 15 tons. The terminal had direct road and rail connection to all parts of the State.

With the advent of the "Empress of Australia" which carries passengers as well as cargo, a passenger lounge was installed. As the sea-road traffic grew to the point of there being a vessel at the berth each day of the week with consequent disruption to the berthing of other vessels at Ocean Wharf, the Board decided to provide new terminal facilities to the south of the existing port. This had become possible with the building of an island breakwater approximately 700 ft. north of the existing breakwater. The chosen area had to be dredged and, on completion of the reclamation, the land was levelled and the new terminal built. This consists of a ramp and transfer bridge 27 ft. wide alongside a prestressed concrete wharf to which the 40-ton crane was transferred. There is a marshalling yard of approximately 6 acres and a new rail depot has been installed adjacent to the ship terminal with rail connection between the two. A high class port roadway carries traffic to the State highway less than a quarter mile distant.

A modern passenger terminal has been built with direct gangway access to vessels berthed alongside. To ensure satisfactory working of cargo at all hours, an excellent system of flood-lighting has been installed as also have a number of electrical points for freezer units awaiting shipment to vessels or rail. A large transit shed which includes facilities for produce inspection purposes has also been provided. The whole of the facilities and surrounding land have been prepared so as to take axle loadings of up to 100, 000 lbs.

BP AUSTRALIA LTD.

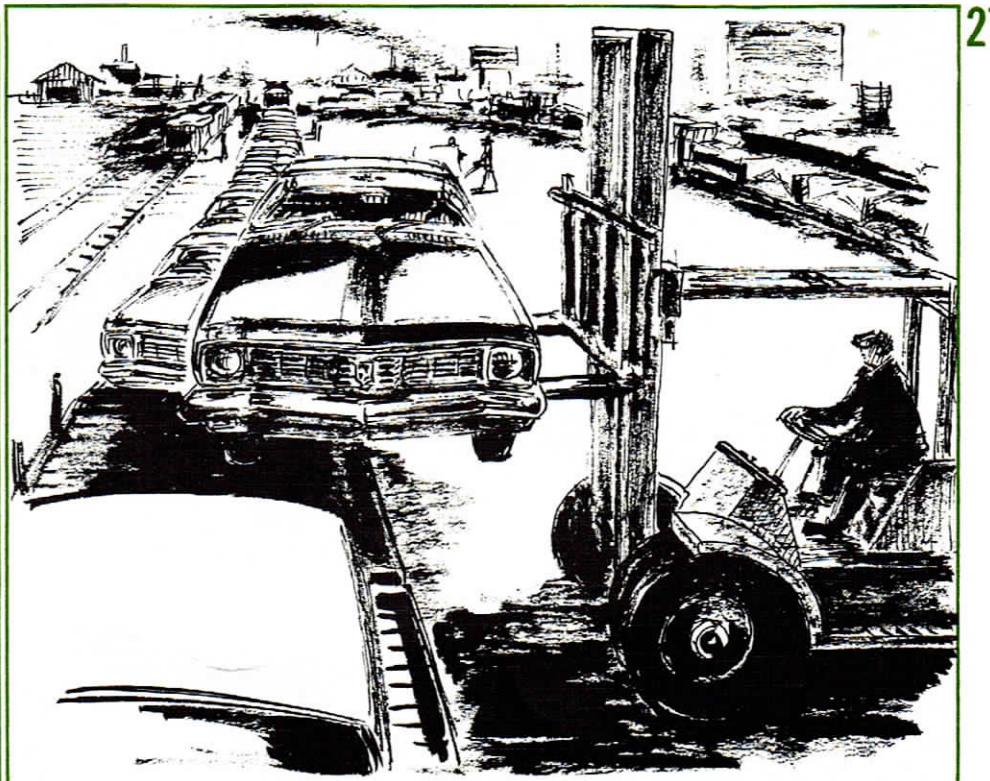
appreciates and uses the Rail Ferry Service for the transport of petroleum products to Tasmania and commends the Transport Department for its valuable contribution by the provision of this service in the development of the State.

BP's capital investment in Tasmania is also contributing to development and the operation of the newly established bitumen refinery is just one of many examples in this regard.

BITUMEN

PAVES THE WAY

IN TASMANIA'S PROGRESS



60,000 HOLDENS FOR TASMANIA!

It's a lot of Holdens in just 21 years, but then Holden is a lot of car. Not all of them, of course, make the rail journey to the Southern capital, but a good proportion does, and we're proud to be associated in this way with the Rail Ferry Services.

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TAKE A LONG LOOK AT TASMANIA

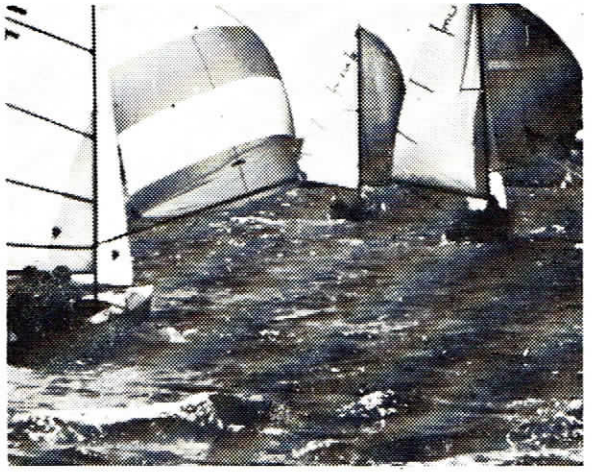
Traffic jams and air pollution are unheard of. The frantic, nervous tempo of the jungle is non existent.

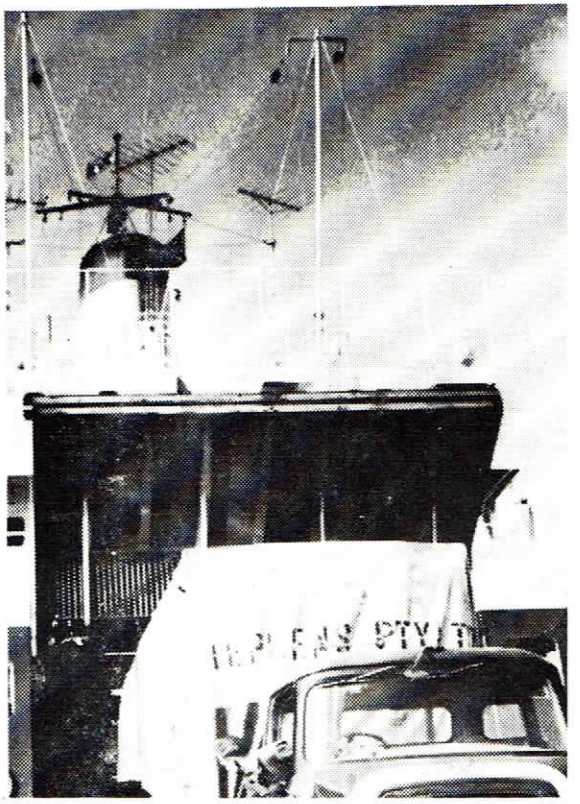
The living is good. Modern schools, hospitals and shopping centres. Suburban life just minutes from the office. Sailing in summer sun - skiing in the winter snows.

It's a good life.

Today, Tasmania is just as much part of the great Australian commercial and industrial scene as any other State. Bass Strait isn't as big a gap as it used to be. Fast Cargo transport has seen to that.

Powerful Industrial concerns like Comalco, Repco, A. P. P. M., Electrolytic Zinc and large manufacturers like Cadburys, Patons, Petersville, I. X. L. have taken Bass Strait in their stride and for good reasons.



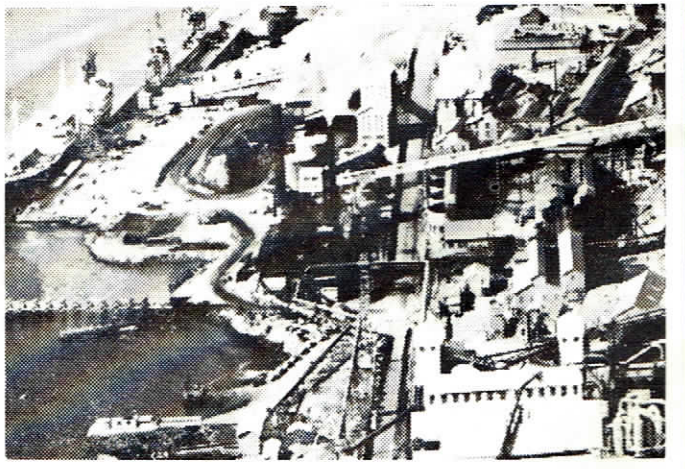


REASONS LIKE:

* Being close to the necessary raw materials.
* Hydro - Electric Power that is cheaper than any other State.
* Land for factory sites close to main cities and ports - considerably cheaper than comparable land in other States.
* Abundant long term water supplies.

Add to these factors a stable work force and you've got a pretty sound argument for expanding your business to Tasmania too!

For further information on Tasmania write to:-
The Director of Industrial Development & Trade,
153 Collins Street, HOBART. TAS. 7001.
OR PHONE 30-3561.



GOVERNMENT ASSISTANCE to INDUSTRY

The Tasmanian Government's policy is to encourage and assist the establishment and expansion of industries. Statutory recognition of this policy is provided by the State Industrial Development Act under the administration of the Directorate of Industrial Development and Trade.

The Government has recognised that there are many problems confronting the establishment of an industry and the functions of the Directorate are directed towards providing maximum assistance from the early discussion stages right through to commencement of operations and beyond. The Directorate has the facilities to give factual advice on such essential matters as availability of raw materials, factory location, electric power, water supplies, labour, wages, industrial legislation, housing, transport, and similar factors of vital interest to industry. Assistance is also given in the conduct of market reviews and the investigation of servicing facilities. The Directorate provides a liaison with other Government departments, both State and Federal, and with professional and commercial organisations and individual people. These contacts may be utilised for the examination of aspects of a proposal. Visits by interested people are encouraged and the Directorate will assist in arranging itineraries.

The Directorate maintains a Research staff whose efforts are directed towards following overseas trends in the location of industry, and the development of industrial estates. Research involves a close study of relative freight costs, markets and other factors relating to a variety of products. The Directorate of Industrial Development also has statutory power to provide financial assistance to industries by:-

(1) Purchase of land for lease or sale to industry;
(2) payment of subsidies and grants;
(3) granting of loans;
(4) guarantee of repayment of loans and overdrafts of companies to other financial institutions.

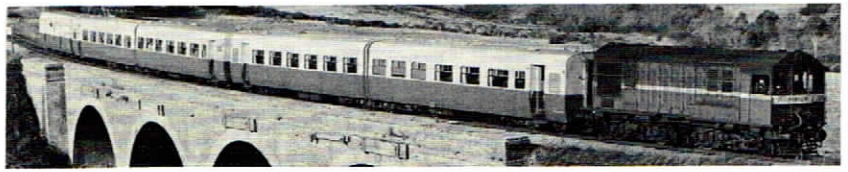
The main form of assistance has been in the erection of factories which are leased to companies with an option to purchase at cost after an agreed period of years. The lessee is responsible for municipal rates, insurances, repairs, and other charges. More recently, the form of assistance most favoured has been by granting loans for the erection of factory buildings.

Repayment terms may be on the basis of equal annual instalments of principal plus interest, or by equated payments of principal and interest over an agreed number of years. Terms are fixed to meet the needs of a particular industry and are usually medium or long term. Initially, interest only may be charged to assist in an establishment period. Besides the actual machinery of assistance administered by the Directorate, the State Government also assists industrial development by granting special mining and forestry leases, by provision of housing for employees, by contracts for the bulk purchase of hydro-electric power, and by implementing public works programmes.

The advantages which Tasmania offers for new industries may be summarised as follows:- Low cost electric power; industrial water resources; equable climate; low cost industrial land near port access; adequate and efficient labour force; raw materials - primary and semi-processed products; door to door delivery services, intrastate and interstate, provided by the Transport Commission's Railway Branch; daily shipping services with low freight costs and a convenient situation in relation to markets. Tasmania has all the benefits of a modern society and a virile economy without the congestion common to Australia's high-population centres.

ALL ENQUIRIES CONCERNING THE ESTABLISHMENT OF INDUSTRIES IN TASMANIA MAY BE ADDRESSED TO THE DIRECTOR OF INDUSTRIAL DEVELOPMENT,
152 MACQUARIE STREET, HOBART, 7000, TASMANIA,
AUSTRALIA.

RAILWAYS DEPEND ON RUBBER



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The technique of rubber-to-metal bonding has enabled an entirely new range of applications to be evolved which can effect substantial savings in weight and, by the elimination of metallic bearings and metal-to-metal rubbing surfaces, can considerably reduce maintenance costs. Spencer Moulton is working in close collaboration with leadi.. Railway Engineers in this field and the technical resources of the Company are at the disposal of engineers everywhere.

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Graham St., Port Melbourne. Phone 69-5701.
ENGINEERS IN RUBBER.

Photograph by courtesy G.J. Dineen Esq. Chief Engineer

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Aerial view of Comalco's aluminium smelter at Bell Bay.

Ingot and rolling block on the wharf at Bell Bay.

Bell Bay, on the Tamar Estuary in northern Tasmania, is the site of Australia's first and largest aluminium reduction plant. This Comalco plant is located in Tasmania because the availability there of low-cost hydro-electric power cannot be matched anywhere else in the country. The plant is the largest single energy consumer in Australia, using about 28% of the power supplied by the Tasmanian Hydro-Electric Commission's entire system.

Designed and built under Government ownership as a 12,000 tons per year operation, the annual capacity of the plant has been increased to 73,000 tons in successive expansion programmes since Comalco took over its management in 1961. Located 30 miles north of Launceston, the smelter complex is a major enterprise involving an investment of more than $50 million. In 1968, it produced 64% of Australia's primary aluminium.

Bauxite, for conversion to alumina and metal, comes from Comalco's huge Weipa deposits in northern Queensland and, in turn, primary metal from Bell Bay goes to a large number of foundry and fabricating outlets throughout Australia, as well as to Comalco's own semi-fabricating plants in Sydney, Brisbane, Perth and Adelaide.

The Tasmanian Government, one of the original shareholders, retains a small preference shareholding in the plant.

An average of 80 ships a year handle about 300,000 tons of raw materials and plant products. Vessel types vary from self-trimming bulk carriers for bauxite and coke, to overseas and coastal freighters for other inward cargo and outward metal.

The introduction of roll-on, roll-off vehicular ferries has made possible the prompt delivery of products to mainland markets. Most cargoes are handled at the plant's own 500' berth where vessels of up to 15,000 tons and 30' draught can be accommodated.

Bulk shipments of bauxite, alumina, coke, and anthracite are discharged by cranes at rates up to 450 tons per hour, and transported by conveyor belt or road transporters to storage areas. The raw materials are then fed as required from stockpile to the various process plants.

PRINCIPAL OFFICERS of the RAILWAY SERVICE

MR. C. G. COLLINS
General Manager

MR. G. J. DINEEN
Chief Engineer

MR. R. G. BARBER
Secretary for Railways

MR. R. C. BRAZIER
Chief Traffic Manager

MR. R. E. MANSER
Comptroller of Stores

Editorial material prepared by the Transport Commission, Tasmania, in association with the Fleetways Group of Companies, Melbourne, N.S.W. Railways, The Australian National Line, Directorate of Industrial Development and Trade, Hobart, The Port of Launceston Authority and Marine Boards of Devonport and Burnie.

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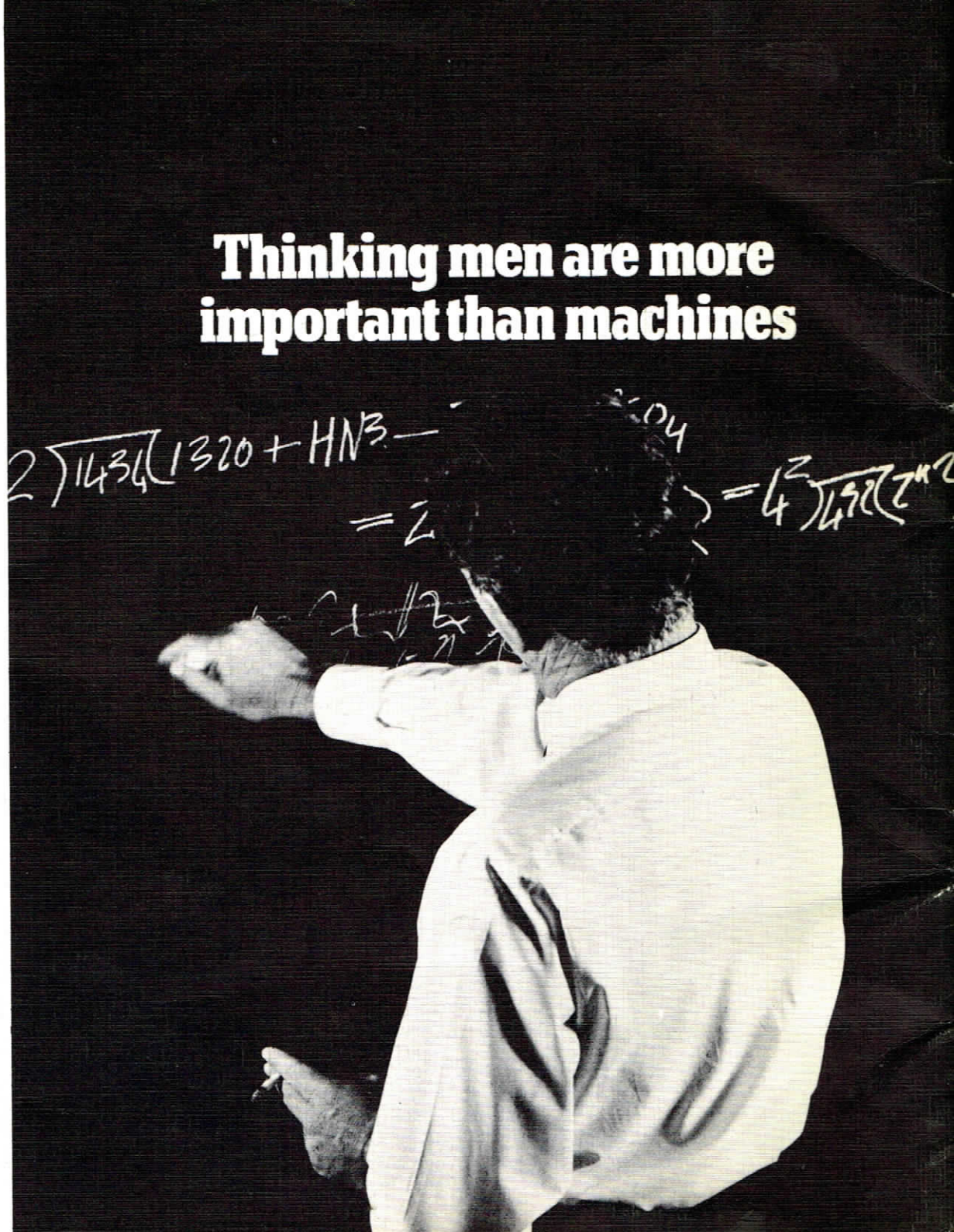
Thinking men are more important than machines